COLMAN'S RURAL WORLD

NORMAN J. COLMAN, EDITORS

Published every Wednesday, in Chemi eal building, corner of Eighth and Olive streets, St. Louis, Mo., at one dollar per ar. Eastern office, Chalmer D. Colman, Temple Court, New York City. Advertisers will find the RURAL WORLD the best advertising medium of its class the United States. Address all letters to COLMAN'S RURAL WORLD, Chemical Building, St. Louis, Mo.

While the RURAL WORLD is published at one dollar a year, it has temporarily allowed old subscribers to send actually NEW OR TRIAL subscribers with their own subscriptions at fifty cents a year, in order to largely increase the circulation and influence of the paper. This price is ters than the cost of the white paper, presswork, folding, wrapping, mailing and repaying the postage, saying nothing of any other of the large expenses of mainaining offices, paying salaries and confucting such a paper in a large city. Reunless accompanied by one or re NEW subscribers must be at one on as subscriptions expire. The month named on the address tag, pasted on each sue, shows the month subscriptions exand renewals should be made two or weeks before, so that names shall not drop out of list. It is gratifying to the proprietor to be able to state, in his century's experience in conducting this paper, it has never enjoyed the and prosperity it .now

Its circulation is increasing in derful degree, and its advertising patrons, many of whom have used its for a quarter or a third of a entury, are more than pleased with reults. Let all our friends unite and press forward in extending its sphere of influence. It will do for others what it is doing for you, so get others to join the great RURAL WORLD army and receive the

Pan-American Exposition at Buffato, N. Y., will be opened to-day. It will comprise a magnificent array of exhibits of human skill and evidences of progress, and will, doubtless, be visited by many of our readers during the period of six months it will be open. Missouri day, it is announced, will be August 19.

The Louisiana Purchase Exposition Company has been incorporated and a Board of 90 directors elected. It is expect-ed that this week officers will be elected

and the company ready for business.

Among those mentioned for the position of Director-General is W. I. Buchanan Director-General of the Pan-America sition and formerly Superintender of Agriculture and Live Stock at the Chi-cago World's Fair. The RURAL WORLD would be pleased to see Mr. Buchanan placed at the head of the Louisiana Pur-chase World's Fair.

dustry in Missouri," we pres (dairy) industry in ansecutive.

the intends to state that up to this time children shall we develop a generation of the state has practically done nothing. farmers properly educated in the business.

The Secretary knows and will readily adof farming. ies have been at work for

AGRICULTURE IN HISTORY.

The State Historical Society of Missor was called to meet in special session Columbia, Mo., last Monday, April 29. calling the attention of our readers to his we suggest that it is a matter in which farmers of the state should be in-erested. On first thought, because of the kind of historical facts which ordinarily it is the effort of teachers to get into the minds of school children, it might seem ridiculous to suggest that a study of his-tory should include agricultural facts; yet it is true that there are many historical facts of an agricultural character that have had a much more profound influence on the trend of affairs and the people than have many of the facts in politica and military history to which much prom

inence is given.

For instance, probably very few of t teachers of history in our public school know that Thomas Jefferson was the firs man in all history to study the plow sci-entifically and to have one made in ac-cord with mathematical principles. Even were the fact known to the teachers, how nany would have any appreciation of the remendous value to the world of what tremendous value to the world of what Jefferson accomplished in this improve-

ment of the plow? Take another fact which in these days is occupying a large place in the public mind and with which Jefferson's name is nseparably associated—the Louisia To how many students of his-NEW subscribers must be at one to have the marvelous development of this region agriculturally been brought home? How many have any conception of the tremendous effect the products from the farms of the Louisiana Pur-chase have had on the commerce of the world and the people of all civilized lands? Yet how little attention is given history.

We trust that the State Historical Society of Missouri will not overbook such facts in its work.

WORK WITH THE CHILDREN.

Two thousand school children in the city of Carthage, Missouri, are to take part this season in a competition for prizes offered for the most successful effort in beautifying the homes of the pupils by means of lawns, shrubs and flowers. Something of how this is being done is set forth on page three of this issue. We hope every reader of the RURAL WORLD will note the article referred to and then try to measure mentally the perional and municipal effect of a season's effort on the part of 2,000 children to grow and care for under intelligent direction, a variety of ornamental and economic plants; and when the mind has become wearied in the vain effort to find the limit of the good coming from such work in town schools, turn the thought farmward and ask what would be the effect on the farm homes of a district, a county, a state and a nation if the children in the rural schools who, for the most part, will be the farmers and farmers' wives of the future could have their young minds opened to the beauty of flowers, the mys-tery of plant growth and a knowledge of how best to develop their beauty and economic value, by some such stimulative plan as that which Prof. Stevens of Carthage has put into operation.

When Secretary G. B. Eilis of the Missouri State Board of Agriculture states, as he does in the bulletin quoted from on page two of this issue, that "practically nothing has been done to develop the" cated and wonderful forces made use of ter than horse and shovel plow. If hand dropping is practiced three grains should be dropped in each check and the distance between the checks is a matter to the four inches. OHIO FARMER. the lied appreciation of the underlying prin-ume ciples. And not until we begin with the



AN OKLAHOMA EXHIBIT.

rom which we had the engraving made vas sent to the RURAL WORLD by V. was sent to the RURAL WORLD by F.

E. Breese, a long-time reader of this paper. The picture is that of an exhibit
made by Mr. Breese at the Oklahoma
City Street Fair last fall. The exhibit
perity and Wealth,"

Okiahoma and its opportunities for included 20a specimens of farm and gar-homes are attracting much attention, and den products, all produced by Mr. B. and for that reason the picture presented with this will be interesting. The photograph excepting a little of the corn, oats and excepting a little of the corn, oats and wheat. This exhibit is good evidence of the fact that Oklahoma farm land is pro-ductive of a wide range of crops. At the rear of the exhibit is Mr.

Breese's motto, "Diversity Means Pros

and cultivated, but will sow closer this year. I think of broadcasting. I am inclined to think we have always sown too early, as I find they grow very slowly unThese were made with corn, tobacco, til it gets dry and hot and the weeds wheat, oats, timothy, clover, potatoes and choke them out. I hope to make a sucgarden stuff, and in every case the crop choke them out. I hope to make a suc-cess with them, as they are the best of feed for anything in the stock or poultry

line.

Some of my neighbors are trying rape for sheep and hog pasture this year. As I have gained the name of crank for experimenting with soy beans, cow peas, and my father wanted his half acre garetc., I will wait and see how they come out before sowing any. J. E. MAY. Adair Co., Mo.

CORN PLANTING AND PLOWING.

Editor RURAL WORLD: I have abandoned the old deep plowing system and adopted the plan of thoroughly fitting the soil to a moderate depth, believing as I do that a good crop of corn depends on a plentiful supply of moisture at all times during the growth of the crop and that this moisture can only be had by a proper fitting of the soil.

We first use the spike tooth harrow and cross the work done with this with the disc harrow; this is again cross harrowed with the spike tooth and the land is ready for planting. In small fields it is impracticable to use the two horse check rower and the crop, if planted in hills, must be dropped by hand and covered with hoe or horse coverer; or it may, in suitable soils, be planted with the hand corn planter. In a coarse or sandy soil, not liable to "bake" with heavy rains, the hand planter is all right; but on our uplands rather deficient in humus I would always drop by hand and cover with hoe or horse im-

be determined by the climate and the fer-tility of the soil. Here, most of us plant 4x44 inches, three grains to the hill. A few plant three grains 48x48 inches and

very few two grains 40x40.

Drilled corn on weedy land is harder to keep clean than check corn, but on clean A MARBLE BUILDING.

A MARBLE BUILDING.

A MARBLE BUILDING.

[Special to the RURAL WORLD.]

Washington, D. C., April 28.—Plans for the rewarding is to be erected with a view to empty agard. April 28, from Washington, on a tour which will extend to the Pacific coast. It will be the longest Journey a president in the United States has ever herestofore the United States has ever herestofore the United States has ever herestofore southwestward from Washington to New Orleans, and thence westward along the Corleans, and thence westward from Washington to New Orleans, and thence westward along the Corleans, and thence westward from Washington to New Orleans, and thence westward along the Corleans, and thence westward along the Corleans and Secretary Theorem the Corleans are the Corleans and Secretary Theorem to the Rural Workld.

A MARBLE BUILDING.

Beyel clean than check corn, but on clean soil the drill is a speedy way of planting.

We advise having the adopting the coldest. We had but little watering the rows 46 inches aparting the coldest. The washington from the Agricultural Department of the Rural Workld. There are many good corn growers who have adopting the plant for the plant for the plant for the plant for the Rural Workld. There are many good corn growers who have adopting the plant for the plant for

may pay as fertilizer. I have the New four to five inches, but I would not ex Era and Whippoorwill. They only made pect to see any best results in an ordinabout one-eighth of a bushel to the acre.

I find it a big job to gather them. We I am not advocating breaking at a modabout one-eighth of a busine to the acre.

I find it a big job to gather them. We have always sown in drills two feet apart erate depth simply as a "fad," ner am l on the shallow breaking and perfect fit ting of the soil was better than that or

> den plowed. I thought to do the worl with an old horse and the double shove plow, but the shovels were rusty and I

took old "Durbin" and the Planet, Jr. five shovel cultivator and with this out-fit I plowed and cross plowed the garden at a depth of about four inches, and as soon as done harrowed and dragged it fine, as a garden should be. Other gar-dens burned up under the drouth which lasted from June 10 to Oct. 14, yet 'that one never produced a better crop of all kinds, from early radishes to late cab-bage under the old plan of plowing eight nine inches deep.

It took the farm papers and all who wrote for them more than 30 years to convince farmers that deep cultivation of corn was a positive injury to the crop, out they succeeded and now no one prac ices anything but shallow cultivation

It may take 50 years to prove to the satisfaction of all that Franklin was wrong when he wrote, "Plow deep," but the time is coming when five inches will be the greatest depth of breaking. No use to cite the abandoned lands of the south, "made poor by plowing with one mule and a shovel plow." That land was Carthage has put into operation.

Reader, think, for a moment, of how plement.

The land should always be marked out cesses and the forces that result in a corn plant, the seed of which you are now putting into the soil. Not in all the realm of industry are there such delicate, compiling the seed of which you are now putting into the soil. Not in all the realm of industry are there such delicate, compiling the seed of which you are now putting into the soil. Not in all the realm of industry are there such delicate, compiling the seed of which you are now putting into the soil. Not in all the realm of industry are there such delicate, compiling the seed of which you are now putting into the soil. Not in all the realm of industry are there such delicate, compiling the seed of which you are now putting into the soil. Not in all the realm of industry are there such delicate, compiling the seed of which you are now putting into the soil. Not in all the realm of industry are there such delicate, compiling the seed of which you are now putting into the soil. Not in all the realm of industry are there such delicate, compiling the seed of which you are now putting into the soil. Not in all the realm of the material, the proper into the followed at all. A lot of furrows was illization which accords to manking an made and half the top soil left untouched. It is many were trying to prepare land for washing by hard rains he could not offer washing by hard rains not plowed at all. A lot of furrows was made and half the top soil left untouch-ed. If a man-were trying to prepare land for washing by hard rains he could not

A Premium Offered to Writers.

Editor RURAL WORLD; The past win-

Oriens, and thence westward along the coast and the second the southern border of the country to the Pacific coast, northward along the coast and thome by a more northern line. The journey will be about 14,000 miles in length and \$\tilde{\t

for the premium offered by Mr. Skeen, the essays should not exceed 1,200 words and should be in our hands by July 1

COW PEA NOTES.

Editor RURAL WORLD: I see a great deal in your valuable paper concerning cow peas. I would like to give the many readers of the RURAL WORLD my experience with growing them for hay. I like the vineless whippoorwills the best as they are easier handled. I have the best success when planting the first half of May. I planted last year about May 15 and my peas were ripe and gathered for seed by the first of September. There wasn't any rain on them after

they began to ripen. I paid 35c per hundred pounds for gathering. It took about 75 pounds of peas in pod to thresh a bushel. The threshing cost 10c per bushel. The threshing cost 10c per bushel. The thresher was patented by Tom Colman of Sebastian county, Ark. It can be operated by hand or horse newer feet in the same of the sam Colman of Sebastian county, Ark. It can be operated by hand or horse power. About 100 bushels per day is a very fair day's threshing. This machine does splen

did work. It cracks very few peas.

I planted 3½ bushels last year and gathered 40½ bushels, and left several bushels in the field which the cattle and hogs harvested, and with good result to the own r. I sold 25 bushels at \$1 per bushel.

I plant in rows three feet apart and to 12 inches in the drill, three to six peas to the hill; I plow twice with cultivator and if the season is favorable there will be plenty of peas for seed and hay.

give some experience I had with fatten-ing some razorbacks (hogs).

W. Y. BERRY.

South Franklin Co., Ark. PARAGRAPHS FROM "THE MAPLES.

Editor RURAL WORLD: The first week in April we moved to our new home on our new farm. It is new only to us in possession, I having known the place for 30 years and I knew, too, what an ideal farm it was for poultry, bees and fruit. "Hitch up to your 'And that is just the farm it shall be, if our lives are spared. Fowls and their product, bees and honey and fruits air not be packed too plants shall be produced upon it. Ninetyseven years ago my great-grandfather fol-lowed the Indian paths through the for-est from Franklin county over the Allegheny Mountains and settled on this very land. His log cabin in which he and his family lived for many years stood within a stone's throw of where I am now writ-ing. They had deer, bear, wild turkeys, ducks and Canada geese, gro as well as domestic fowls in those days in abundance. I will have, I hope, in time, all but the bears. I will be content to let them live peaceably in their wildernes homes in the central counties of the glo rious old Keystone state.

And right here I wish to remark that Pennsylvania is good enough for me. I like to see a man proud of his country, his state, his home. For my part I love these hills with their wealth of coal, iron, clay and limestone. I love the timbered ridges, the rapid flowing creeks between and the many rivers; and I love the people who are yearly advancing in educa tional facilities, in agricultural methods and lore and in that highest form of civ-ilization which accords to mankind an equal place and right without reference

farm as they occur and the knowledge gained in 24 years' work in the fowl yard and among the incubators, brooders, bone mills and all else pertaining to the work of growing and selling fowls and eggs.

And if they are flavored with the fragrance of honey and honey plants or of fruit trees in bloom or in fruit, it must embered that these three comprise the trio—the "three graces" whose presence we court at "The Maples."

We are in latitude 41 degrees north, winters rather long and often severe. Peaches, especially the seedlings and hardiest sorts of the budded, do well in proper locations. Apples do very well and cherries, pears, plums and small fruits are produced of good quality. GEORGE ENTY.

Armstrong Co., Pa. AMOUNT TO SOW.

mproved methods in the agricultural world are something to cause congratula-tion, I have been impressed with the conviction from observation and study that there is a wide field for improvement in the amount of clover and timothy seed sown to the acre, were the purity of seed, the preparation of the seed bed, time and manner of sowing, etc., etc., as carefully looked after as they ought to be. It comes to us from headquarters at Washington that there are about 17,856,000 the patch, leaving a "dead line," and as seeds in a bushel of clover. Writers for the seed the seed line, and as fast as I could walk, I made several lines around, etc., any way I wished to iction from observation and study that Washington that there are about 17,856,000 seeds in a bushel of clover. Writers for the agricultural press usually advise us to sow from five to eight bushels of clover seed on 40 acres. Now, take a rainy day and amuse yourself and brighten up your arithmetic by ascertaining, at this rate of sowing, how many grains of clover seed you put on every square foot of ground, supposing the seed to be distributed regularly, which is the rational way to reckon it. You will be somewhat surprised, methinks, to see how much more seed you are getting on the ground than

is necessary, under proper conditions. I recollect some four or five years ago passing by a 40 acre field of clover on the farm of one of the best farmers in north-ern Bates county. It was in full bloom,

replied:
"A half bushel."

divided by 43,560, the number of square feet in an acre, and we find we have 51 clover seeds on every square foot of land. Now, I am going to assume that there has been a heroic use of the fanning mill, blowing out all but heavy, well matured seed, that the ground has been put in the best of condition-for a seed will hardly germinate and grow between two hard clods the size of a goose's egg-and perfect tilth.

The following illustrates my idea of

tilth: I was at the home of one of the finest wheat growers in Cass county a few years ago, when his hired man came pe plenty of peas for seed and hay. In from dragging, rolling and harrowing If this escapes the waste basket I will in the preparation of a 40 acre field for wheat. I passed by the field and it look ed like a prepared garden. The old man

"How are you getting along, boys?" One of the men who evidently thought it nonsense to expend any more work on the ground, said:

"Well, it's just in as fine fix as it ca

ossibly be."
"Well," said the old man (whose language is not particularly classical):
"Hitch up to your 'harries' and turn and

The old man knew his seed bed could not be packed too much or be too fine

Perhaps a goodly number of apod seeds will be blown over with a vigorous use of the fanning mill, but there are many places where they will be utilized by the up-to-date farmer.

I. M. ABRAHAM.

NOTES FROM THE SCIOTO. Experience With Cut Worms.

Editor RURAL WORLD: I will give my experience with cut worms last year. To give the reader a correct idea of our ituation, soil and occupation, I will say hat we are located on the Scioto marsh which at one time was covered with wa-ter, but is now thoroughly drained. Our oil is a deep black muck composed of de cayed vegetable matter. Our principa money crop is onions, though potatoes abbage, parsnips, etc., are no mean fac tors in many cases. Grass grows rapidly and clover makes an especially rapid growth. This seems to be the cut worm's paradise. In my ten acre onion field last year I took in two acres of clover sod. When onions began to come up I noticed that on that part of the field onions did or change. The cheapest reaches per the control of the sacertain what the trouble was, and to my surprise I found them cut off right at the top, or a little under the top of the top, or a little under the top of the sacertain was and to my surprise I found them cut off right at the top, or a little under the top of the sacertain was a surprise I found them cut off right at the top, or a little under the top of the sacertain was a surprise I found them cut off right at the sacertain was a surprise I found the sacertain that on that part of the field onions did my surprise I found them cut off right at the top, or a little under the top of the ground. I soon found it was the work of

A neighbor told me he had just read in a paper that by taking green clover, dip-ping in poisoned water and placing it around in bunches, the worms would eat it and it would kill them. Not having green clover I used green rye. I took an old dishpan, put water and Paris green in the pan, then took rye and immersed it thoroughly, and then placed bunches

North Fourth street, who will many address on receipt of 5 cents.

MISSOURI CROP NOTES. along a few feet apart, a small handful in a bunch. I then took middlings (bran or cornmeal will answer the same pur-pose) and used just enough Paris green to color slightly and scattered a small amount on each bunch of rye. When I got to the end of the rye I just scattered a line of the poisoned feed on the ground a few steps.

Two days later I went out to look for

results. At the first bunch of rye I found 21 worms, most of them dead and the oth-Editor, RURAL WORLD: While the ers in a very sad plight. Under the next bunch I found 3 worms and under the third bunch I found 78. I counted no far-ther. I just said to myself, "That is good enough." I then examined the line of

bury themselves before they die, but many of them do not have time for that. I told of my experiments to a neighbor who was suffering loss from worms and he tried it and failed, but he put his feed and meeting the owner, I congratulated in the ground, the same as if drilling him on the beauty of his clover field. He asked us to go over with him and look over the field (for I had looked at it 80 rods away). I did so and found the stalks wondrously evenly distributed, and the ground as to tilth absolutely faultless.

"How much seed," said he, "do you suppose I sowed on this 40?" suppose I sowed on this 40?" out in search of food, and when he finds
I do not remember my answer, but he this line of food he just stops, feeds and

help, hints, suggestions, etc. They re-ferred me to an experiment where they used sweetened poisoned commeal, under boards placed around in the field. The idea of a portable lumber yard in an on-ion patch or corn field struck me as ri-diculous. To say the least of it, it is not practical. Where ground is too rough to ise a drill, I would use the rye or clover and poisoned feed.

I never had any dealings with the army worms, but think they are quite different. I think they move in great bodies in countless numbers on top of the ground in daylight, and when in sufficient num-

I don't know whether they would relish a diet of middlings and Paris green or not, but if they come my way I shall cer-tainly try them and see if they are dain-try feeders or not. If they take to it readily I shall lay their carcast the use of chilled shot or

There is activity on the marsh at present-great preparations for sowing on-ions. The acreage this season will prob-ably be about the same as last year. But last year the "early bird caught the storm" and those who sowed after April 25 were generally the successful ones. We expect to sow 16 to 18 acres. This means many days of hard work. It may mean a oss of several hundred dollars; but if we get a fair crop and a fair price it means everal hundred dollars in our favor. GEO. D. BOWERS.

Hardin Co., O. LETTER BOX.

NOTES FROM THE CLIFF.-Here we are in the very midst of corn planting and a large acreage is being covered. The continued wet and cold weather during April delayed the work and prevented the sowing of as large an area of oats as was intended, consequently the corn acreage will be larger. Fruit of every kind is in bloom the last

two weeks and the prospect is fair for an abundant* crop, notwithstanding the annual croakings of the prophets of failure.

The annual school elections for direct-The annual school elections for direct-ers in the various districts occurred re-cently and in some localities considerable interest and excitement was engendered, mostly along local lines. Yet it occurs to us that but little benefit is gained by these contests, for those selected move along in the old rut without variable or change. The cheapest teachers

THE LOUISIANA PURCHASE, a boo of merit giving a concise and accurate record of that great acquisition of Louisi-ana; the brightest crown in the statesmanship of the immortal Jefferson, has neen issued and placed before the public by its publisher, Azel B. Howard, 110 North Fourth street, who will mail it to

PERRY CO. S. E. MO.-Wheat at present is in good condition, none being plowed up. April 30.

ST. LOUIS CO., E. MO.-The wheat crop in this county is good. There will be none plowed under. Pastures and mead-ows look well. Spring plowing is far ad-

vanced and we are planting corr April 30. C. J. PURDY:

MILLER CO., CENTRAL MOSThe crops of wheat and rye are in flourishing condition, standing thick on the ground and about eight inches high. Two years ago the army worm killed many o meadows which have been replanted, but many of them are too young for a full

cold for spring pastures.

April 37. W. G. CLARK.

PULASKI CO., CENTRAL MO.-Some wheat was damaged by fly last fall. But if the weather is favorable, the prospect is good. It has been too cold for pasture and spring plowing. Oats are sown and corn planting is in full blast.

April 29. W. H. GOODMAN.

MONTGOMERY CO., E. CENTRAL
MO.—Some little wheat is killed by the
fly. Our greatest fear is that the growth
is far too rank and that much of the erop
will fail before heading. We often have
fields to average over 30 bu. per acre, but
the wheat on poor ridges cuts the average down.

H. C. SCANLAND.

The Dairy.

OLEO CASE COMPROMISED.

Washington, April 24.—The case against George Goener and J. D. Hatch, of St. Louis, proprietors of the Lincoln Dairy y, has been compromised with the of the Secretary of the Treasury. They were accused of selling oleo-margarine for butter without affixing the ary brands on the packages. matter was fully investigated and the conditions of the case were such as to dis-pose the department officials to be leniant toward the offenders against the law. It was decided that no prosecution should be rted, but that the case would be compromised on the agreement of the offenders not to again violate the law and to

MISSOURI DAIRYING.

The secretary of the Missouri State Board of Agriculture, G. B. Ellis, gives ce that he is a man of ideas and mah in the character of the Monthly Bulissued by the Board. The Bulletin for April is a departure from former is-sues, and as such it is No. 1 of Vol. 1. Its contents are arranged in four divisions. The first is the usual crop report for April 1; the remaining divisions are devoted to different phases of the dairy industry— Status of Dairying, Dairy Science and

lletins, it is announced, are furnished free to those requesting them. Following is what Secretary Ellis has to say on the subject of Missouri Dairy-

THE PRESENT STATUS.—We can not record such a condition of dairying in this State at this time as a pardonable state pride would permit, but we have the evidences of a new era in dairy devel ent which is now dawning. It matnot now what has been the cause has kept us in the background in dairy farming in the past, whether it has the natural conservative disposition ple, or whether it has been beand a productive soil, making grain farming and beef and pork raising very profitable, or whether it has been because of a us consider conditions as we find them today and the progress we may reasonably

The gathering of trustworthy and reliable data upon any subject in and for a great State like Missouri, and that without the aid of any legal authority, or the financial support necessary, is an under-taking that requires time and energy and often met with disappointment.

1, 1900, about 2,172,572 cattle, from which ter carelessly handled will bring but 10 or we estimate that there are 723,000 cows or 12 cents per pound. Most of this difference. Making a reasonable estimate for ence is frequently caused by the difference the number that are used for breeding ence in handling and marketing after it is place the number of cows in the State available for dairy purposes at 500,000. A large number of these cows are used for and after the calves are weaned the cows are meeting with a good degree of success are dried off and "roughed" through the winter, thus producing but a very small profit to the owner above the cost of farmers engaged in raising pure-bre teaching. are kept in private milk dairies that furfrom forty milk dairies located in different parts of the State and probably repent parts of the State and probably representing a fair average condition, we sowing to local conditions there are localising that the average annual production there are localised in Missouri where on account of mild resenting a fair average condition, we find that the average annual production per cow is 4,100 pounds of milk, calculated at the average price received per 100

at the average price received for butter, 23 cents, makes \$58 per head, not counting

From about thirty creameries and skimming stations reporting more than 10,000 cows, the average number of pounds of our farms. What are they producing unmilk received per cow is 4,000 pounds, average price paid for milk at 73.3 cents per culations for the following comparisons.

cents per hundred pounds, the average farm. price reported for milk, makes only \$26.85

factories, and a large number of private milk and butter dairies. From the re-ports we, have at hand, aided by the cenports we have at hand, aided by the cen-sus figures of 1890, we estimate the num ber of cows furnishing milk for these pur poses to be 100,000. If these produce an

There Are 2400

Disorders incident to the human frame of which a majority are caused or promoted by impure blood.

effectively purifies the blood is known to every druggist, known to hundreds of thousands of people who themselves er by their friends have experienced its curative powers.

annual product worth \$45, which is much below that made by either the butter or milk dairies reporting, but above the support of this answer "it will pay;" and in support of this answer we have the practical value of \$4,500,000. We estimate that \$40,000 cows are kept on the farms primarily for raising calves, but from which a considerable quantity of butter is produced for home consumption and the surduced for home consumption and the sur-plus sold to local trade or to shippers.

worth of dairy products for the State.

This is certainly not a bad showing when we take into consideration the fact that practically nothing has been done to develop the industry in Missouri. This calculation, it will be seen, does not reckon the value of the manure returned to the land or the calves annually raised, which at a low estimate would add not less than \$10,000,000 to the amount.

THE FUTURE.-With a climate as favorable as the best dairy countries of the world, possessing a soil equal to if not superior to the same area anywhere on earth that will produce abundantly the best of dairy feeds at a nominal cost, ac-cessible to splendid markets that are found within our borders and at our western door, with more than one-half mil lion cows now in our pastures that may gent people, who is ready to say that with a little encouragement from the State, it is impossible or improbable that Missouri may in another decade become one of the may in another decade become on leading dairy producing States Union?

STATE ENCOURAGEMENT.

The last General Assembly recognize the importance of this industry when provided by law for the establish Chair of Dairy Husbandry, in the College of Agriculture, and made an appropriation of 45,000 to sustain it. The au thorities of the College assure our peop that this Chair will be filled by an up-to date practical dairyman, whose time, for the present at least, will be given entirely to field work. He will travel over State, hold schools of instruction, an State, hold schools of instruction, and give private information where possible upon all the details of the business, thus taking the Dairy Department of the College of Agriculture to the very door of the farmer.

The Forty-first General Assembly further provided at a cost of \$40.00. for

ther provided, at a cost of \$40,600, for building and equipping a dairy and live stock building on the grounds of the College of Agriculture, where the very best equipments will be furnished and the most competent teachers obtainable will that requires time and energy and a met with disappointment.

taking charge of this office the the present year, we have not at the present year, we have not at the present year. State offers free of cost? We some effort to find out what the present status of the dairy condition is, and while our reports are at this writing very imperfect, we shall continue with the aid of those interested until a complete and reliable report can be made of this important business in this State.

From the State Auditor's report we learn that there were in Missouri on June 1, 1900, about 2,172,572 cattle, from which we estimate that there are 723,000 cows or think it necessary to argue with the farm

WILL IT PAY?-This is perhaps the first question a man will ask, and very properly so, when investing in a new business. It is certainly not the province r calves and for the production of business. It is certainly not the province and butter for home consumption, of this bulletin to advise farmer when profit to the owner above the cost of farmers engaged in raising pure-bred or keeping. A considerable number of cows are kept in private milk dairies that furnish milk directly to the consumer in time will never come, in our opinion, when the production of first-class breeding is 4,100 pounds of milk, calculated winters and long summers, coupled with average price received per 100 cheap lands, that cows may be profitably makes an average per cow of kept for the raising of calves only. But eliminating all of those who are oresding For about the same number of butter pure-bred cattle, and all who are reason airies the average annual production is ably well satisfied with the profits of their 282.5 pounds of butter per cow, calculated, at the average price received for butter, whom we think we can show by actual results obtained by others, who can very profitably go into the business of dairy-

Take first the large number of cows hundred makes \$29.32 per head.

From eleven cheese factories reporting a basis, re-enforced by reports we have used the census reports of 1890 as a basis, re-enforced by reports we have used the census reports of 1890 as a basis, re-enforced by reports we have used the census reports of 1890 as a basis, re-enforced by reports we have contained from the cents per hundred pounds, the average forms of the contained from the following comparisons, we have used the census reports of 1890 as a basis, re-enforced by reports we have used the census reports of 1890 as a basis, re-enforced by reports we have used the census reports of 1890 as a basis, re-enforced by reports we have used the census reports of 1890 as a basis, re-enforced by reports we have used the census reports of 1890 as a basis, re-enforced by reports we have used the census reports of 1890 as a basis, re-enforced by reports we have used the census reports of 1890 as a basis, re-enforced by reports we have used the census reports of 1890 as a basis, re-enforced by reports we have used the census reports of 1890 as a basis, re-enforced by reports we have used the census reports of 1890 as a basis, re-enforced by reports we have used the census reports of 1890 as a basis, re-enforced by reports we have used the census reports of 1890 as a basis, re-enforced by reports we have used the census reports of 1890 as a basis, re-enforced by reports we have used the census reports of 1890 as a basis, re-enforced by reports we have used the census reports of 1890 as a basis, re-enforced by reports we have used the census reports of 1890 as a basis, re-enforced by reports we have a census reports of 1890 as a basis, re-enforced by reports we have a census reports of 1890 as a basis,

.. \$66.58

and from actual observation, we think the fairest comparison can be made with the creamery class. These cows are not generally any better grade, neither do they receive any better care than class No. 1, but there is a difference of \$15.39 in

BUILDINGS AND EQUIPMENTS. One of the drawbacks to the development of the dairy industry in Missouri has been plus sold to local trade or to shippers.

These cows produce upon an average 100 of the drawbacks to the development these cows produce upon an average 100 of the dairy industry in Missouri has been purpounds of butter that sells for 12% cents per pound, which makes a total value of \$5,000,000. To this should be added the The value of the skim milk which is worth at a low estimate \$2.50 per cow or \$1,250,600, put in a complete outfit, receiving two or three times what the plant should cost. three times what the plant should cost. We do not say that there is not a legiti-mate field for agents of creamery manufacturers, in promoting the dairy inter-ests, but on account of the work that has been done in the past we advise our farm-ers that when they conclude to establish a creamery or cheese factory, to procee with the same caution that they any other business transaction. The building can be erected by a resident con tractor more cheaply than by a non-resi dent. You can secure net price lists from two or three manufacturers and with the assistance of the manager, who should be a practical creamery man, you need not nake the mistake that has been made by others, whether you make a contract fo

> From reports received from a number of the managers of creameries and cheese factories that are doing a satisfactory business in different parts of the State we would say that a plant for making only, having a capacity of 4,000 of milk per day, can be erected for \$200 to \$1,000, which includes \$500 to \$600 as the cost of the building.

For a plant with a capacity of 6,000 to 10,000 pounds of milk per day, the buildin should be erected for \$1,000 to \$1,500 an equipped for about \$500, making a total ost of \$1,500 to \$2,000.

From the same source we received the statement that a creamery plant of the capacity of 8,000 to 10,000 pounds of milk per day should be built and equipped for

One manager reports, "we contracte for our plant complete for \$3,950, but we could build now and equip from any re-

Another says, "we paid \$4,400, unde contract, but could be put up now for \$2,000." Another says, "a building should be put up for \$700 and equipped for butter making for about \$1,000, but ours cost in the first place \$3,300, and much of the ma

If you feed and water stock, it will pay you to write O. K. HARRY STEEL WORKS, St. Louis, for their Illustrated Catalog of Feed Cookers Hog Troughs, Tanks, etc.

WHAT WE NEED.

Editor RURAL WORLD: Were one to make a farm-to-farm canvass of any farming community he would find that less than five per cent of the farmers know anything about a balanced food ra tion for stock, or, knowing, make any effort toward more economical feeding by giving a combination of feed containing the elements needed for best growth and

Dairymen have been the pioneers in formulating and feeding balanced rations for milk production, yet the general farm er, if he keeps one team of horses and a cow or two, is or should be interested in these feeding problems.

For the benefit of readers who have given this question little or no thought, I expect to give a few tables showing com-position of foods, and the nutritive ele-ments needed by different animals. And let me say in the beginning that these ta bles are the conclusions reached by care ful investigators seeking to establish feed ing standards. Among these investigators are some of the best chemists to be found in America and Europe, and the tables are the results of many years' of labor condensed to this form.

In feeding one must remember that there are other factors besides the feed that enter largely into this question; environment, care, the ability to digest and assimilate are, perhaps, the most promi ent. Thus a man may be an expert in feeding and formulating a ration, but it he does not consider the other factors he will fall short of success. I think this is the one great reason why some men fall to get good results from feeding a baltogether they are a herd; but the herd is color, or ability to digest and assimilate, .\$15.90 or in yield of product. One will lay on fat, while the next, her stall mate, will grow thin in flesh on the same ration. One will need her full 16 pounds of carbo hydrates and two pounds of protein to do her best. The other will get along with ten or twelve pounds of carbohydrates and two pounds of protein. It is for this reason that no iron clad rule for feeding can be laid down. The individual must be studied and the animal must be fed as an individual.

That the tables and terms used in tables that are to follow in later issue may be better understood, I give the following glossary from an exchange: Ration.—The total allowance of feed for

24 hours.

they receive any better care than class No. 1, but there is a difference of \$15.90 in favor of the creamery. The labor in making the fire of the creamery. The labor in making the fire of the creamery. The labor in making the fire of the creamery. The labor in making the fire of the creamery. The labor in making the fire of the creamery. The labor in making the fire of the creamery. The labor in making the fire of the creamery. The labor in making the fire of the creamery. The labor in making the fire of the creamery. The labor in making the fire of the creamery. The labor in making the fire of the creamery. The labor in making the fire of the creamery. The labor in making the fire of the creamery. The labor in making the fire of the creamery. The labor in making the fire of the creamery. The labor in making the fire of the creamery the creament and other virulent blood discreases, are conquered by it, while those cured of boils, pimples, dyspeptic and bilious symptoms and that tired feeling are numbered by millions.

Hood's Sarsaparilla

Will do you good. Begin to take it today

The worst cases of scrofula, the five receive any better care than class No. 1 with there is a difference of \$15.90 in favor of the creamery. The labor in making the five the nitrogen, hence the pitce in gint requently termed the nitrogenus parts of foods. They are also called albuminoids. Carbohydrates.—That part of the digestion of foods. They are also called albuminoids. Carbohydrates.—That part of the digestion of making the nitrogen, hence the pitce pitce nitrogen, hence t

DE LAVAL SEPARATORS.

V

development. The "Alpha" disc invention is restricted by patents to the De Laval chines only. The 20ra CEMPURY improvements
give them still greater onpacity and efficiency. They
are as much superior to
the best of other serara-All sizes, styles and price

THE DE LAVAL SEPARATOR CO.

called because it does not contain any ni-

CHICAGO. 74 CORTLANDT STREET

Ether Extract.—That portion of the dicut of stuffs by ether. It is frequently called crude fat, and can be used by the animal for maintaining the body temper-ature. For this purpose it is from 2.2 to 2.5 times more efficacious than the carbohydrates. It is maintained by some that the fat in milk comes largely from the crude fat in the food, but it has been lemonstrated that it is not absolutely

ecessary for this purpose.

A careful study of the foregoing will be stand the "whys" of feeding.

M. E. KING. Buckeye Dairy Farm Labette Co., Kan.

HAND RAISED CALVES.

A Kansas writer says: "The greates wail set up in opposition to the dairy busi-ness in many localities is that a good calf cannot be reared on skim milk. Do these farmers suppose for one minute that the housands of calves reared in Wisconsin Minnesota, Iowa and Illinois, all great dairy states, are not up to the standard as stockers and feeders? Not much. The farmers there are as much in line with a

exercise the same care in calf feeding. The beef industry of the United States would be in a sad plight were it not for the hand raised calf "To replace the fat taken from the milk

by the separator nothing is better than flaxweed. The seed should be ground to a meal and a quart soaked in one and onehalf gallons of water for an hour, when it will be in the form of jelly. When the calf is a week old, and fed on its mother's milk until this time, give it a half teacupful of the jelly in warm milk, increasing the jelly as the calf grows. The ration will be found to make a most satisfactory substitute for whole milk and, with judgment used in feeding, will produce a good

CHURNING TEMPERATURE.

Dr. S. M. Babcock, of the Wisconsin Agricultural College, states as follows the reasons that underlie the difference in churning temperatures in different locali ties, and in the same localities at different

times of the season: Churning consists in bringing the fat globules of milk or cream together under such conditions that they will adhere and form butter. When the temperature is and bran or shorts. too high the fat has little consistency and the small particles of butter formed are so ularity in time of feeding, qu easily torn up again that the separa-tion is not efficient. Under such conditions also the butter is soft and of poor quality
If the temperature should be above the melting point of the fat it will be impos sible to obtain butter by any amount of churning. On the other hand, when the are hard and do not readily adhere to each other, and under this condition also

to get good results from feeding a bal-anced ration. And this point must always be kept in the mind of the feeder, that there is individuality in all kinds of cattle and that the successful feeder must feed individually and not collectively. I go into our cow stable to feed our cows. Alchurned at a lower temperature than calf will always act together they are a herd; but the herd is composed of 3 individuals, no two of which are alike in temperament, in size, color, or ability to digest and assimilate, ways be lower than when dry feed is given the temperature should always act more nungry arter that from Jersey cows. When succulent taking its meal than it did before, but it is better thus than to give it a larger ways be lower than when dry feed is given mess and then have a case of scours or en. As the period of lactation advances bloat on your hands. The milk should the fat becomes harder and the temperature of churning should be raised

The amount of fat in cream is another a temperature as possible and have the utes. This temperature may vary, under different conditions, from 40 deg. F., to over 60 deg. F., and should be dete for the cream which he handles.

THE HOLDEN (MO.) CREAMERY.

the bowels as excrement.

Protein.—That part of the digestible nutrients which goes to the formation of lean meat, ligaments, hair, horns and the casein (or curd) of milk. It is generally believed also that protein may be and many times is converted into the fat found in the milk. The basis of protein is nitrogen, hence the protein elements are frequently termed the nitrosenous parts. In the creamery line. Our receipts of milk last month showed an increase of 100,000 pounds over March, 1900. We are receipts of milk last month showed an increase of 100,000 pounds over March, 1900. We are receipts of milk last month showed an increase of 100,000 pounds over March, 1900. We are receipts of milk last month showed an increase of 100,000 pounds over March, 1900. We are receipts of milk last month showed an increase of 100,000 pounds over March, 1900. We are receipts of milk last month showed an increase of 100,000 pounds over March, 1900. We are receipts of milk last month showed an increase of 100,000 pounds over March, 1900. We are receipts of milk last month showed an increase of 100,000 pounds over March, 1900. We are receipts of milk last month showed an increase of 100,000 pounds over March, 1900. We are receipts of milk last month showed an increase of 100,000 pounds over March, 1900. We are receipts of milk last month showed an increase of 100,000 pounds over March, 1900. We are receipts of milk last month showed an increase of 100,000 pounds over March, 1900. We are receipts of milk last month showed an increase of 100,000 pounds over March, 1900. We are receipts of milk last month showed an increase of 100,000 pounds per week now. It is not hard to find the reason for our success here. Six of our directors furnished 20,612 of the protein many time of 100,000 pounds per week now. It is not hard to find the reason for our success here. Six of our directors furnished 20,612 of the protein many time for the first milk of the directors furnished 20,612 of the protein many time for first milk of the first milk of

MISSOURI CREAMERY NOTES

HOLDEN, MO.-Mr. S. N. Cayton, liv ing southeast of town, has been a cream-ery patron from its beginning. His last month's milk brought him \$54.73 from 12 cows, part of them only strippers. He proposes to sow a patch of cow peas to test them as feed. He agrees with the "Enterprise" that our farmers need to raise more grass, more milk and more poultry and go after rock roads.—Holde

PALMYRA, MO.—The creamery payrol for the month of March amounted to \$961.58, the patrons being paid on a basis of 21c for butterfat. Receipts of milk are growing so rapidly that Mr. Rohrer has en compelled to purchase another arator and has accordingly bought fr the DeLaval Co. their Ac the LeLaval Co. their Acme turbine ma-chine, having a capacity of 1,760 pounds per hour.

Two of the patrons this month furnish

a fine demonstration of the theory that "there are cows and cows." Mr. Springer and Mrs. Dine Owsley each furnished milk from one cow. The Springer cow earned \$4.06, while the Owsley conher owner \$6.81.—Palmyra Herald.

MARION CO. (MO.) NOTES.

Editor RURAL WORLD: The dairy in ustry in this section of Marion county, while considerable, could advantageously e much increased if there were more o cert of action among the farmers and working for mutual interests. The blue grass on this limestone foundation gives the cream a rich color and fine flavor pe uliarly its own.

The Palmyra Creamery has created more demand for good milch cows among its patrons, which has stiffened prices in this neighborhood. The station, Oak wood, near me, would be a good point for skimming station if the against creameries among the farmers against creaments of the could be overcome by some one showing them the benefits; they can't seem to see the money to them in it; and the larger the business the better the prices to cream customer.

N. T. J.

CALF FEEDING.

Prof. T. L. Haecker, St. Anthony Park linn., writes of calf feeding as follows I have now made calf rearing my busi ness for over 20 years, and during the last 15 have placed my chief reliance on skim milk. For growing calves I consider sep cood calf as is any class of farmers on arator skim milk at least equal to whole the content of and be as thrifty on skim milk. There is nothing in butterfat that a calf can u building body nilding body tissue. Butterfat can be onverted into body heat and body fat and nutriment for this purpose car supplied more cheaply with flax n supplied more cheaply with flax meal, which contains from 30 to 35 per cent oil. My system of feeding is very uniform. When the calf is dropped, I let it suc once and then remove it from the dam. If it is removed in the morning, I give it no feed until the following morning. This is done so the calf will be hungry and will drink the milk without the finger. I give from three to four pints of its mother's milk twice a day, immediately after milking the dam. A small calf gets three pints and a large calf four pints. This I con-tinue for about one week. Then for one week I give it whole milk half and skim ntik half twice a day, giving it only from three to four pints. The third we feed all separator skim milk, but put in the milk a teaspoonful of ground flax. I gradually increase the skim milk and flax meal so that, by the end of the fourth month, if is receiving a heaping table-spoonful of flax meal and 10 pints of milk twice a day. After the first month it has ccess to a little early cut hay and a little

important points are strict reglarity in time of feeding, quantity and emperature of milk, which should be

from 98 to 100 deg. F.
From the first of June the skim milk hould be pasteurized, so it will not get sour. A year ago last spring the Albert Lea creamery put in a pasteurizer, and that summer the patrons fed their calves upon the formula given above. In midmmer I visited the creamery and ques tioned the patrons in regard to the results obtained, and all stated that it gave entire satisfaction.

ties harder and the tempera-ing should be raised.

tof fat in cream is another

Each calf should be fed by itself out of a factor which affects the temperature of clean tin pail, which should be washed cream at a ower temperature than poor cream. Generally a low temperature gives a firmer and better quality of butter and a good rule to follow is to churn at as low a temperature as possible and have the churning completed in form 30 to 60 miles. Have the little manger in school.

ESS CO., Box 772, Columbus, O. 2-The Improved United States Separator as it appears on the market to-day is the result of years of study and experiment. While we do not claim it is perfect, although many users say it is as near perfection as possible, yet we do claim that it is unequalled by any other make on the market. This claim is based upon its work at Experiment Stations and in Dairies and Creameries the country over, where it has demonstrated many times that it Does more exhaustive skimming, therefore Saves Cream:

DEAL DIRECT with the Makers.

Has greater capacity according to price, therefore Saves Time: Requires less power to run and less time to clean, therefore Saves Labor: has greater simplicity and durability, therefore Saves Expense. In fact it has so many times proved in competition

with other makes its overwhelming superiority as to make good its right to be known as The Standard Cream Separator of the World

If you will follow the advice of its users you will investigate its merits before buying some other make said to be "just as good." Remember there are none such.

We also sell a complete line of Dairy and Creamery Apparatus. Write for descriptive catalogues of what you are in need of.

REPRESENTATIVES WANTED TO HANDLE OUR GOODS IN TERRITORY NOT ALREADY COVERED. VERMONT FARM MACHINE CO., Bellows Falls, Vt.

THE COLUMBIA TREAD





rom 8 to 20 H. P. M. RUMELY CO., LA PORTE, IND.

front of them wide enough so an ordinary tin pail containing the mess of milk can be set into it. Have partitions placed in the manger and when it has taken the milk, take out the pall and if the calf is old enough to eat oats or bran, throw in about a tablespoonful, and it will soon get in the habit of chewing the oats as The most tavorance comparation point or consistency of the fat, and as this is subject to considerable variation it is impossible to fix temperature which will give the best of the possible to fix temperature which will give the best of the possible to the possible to fix temperature which will give the best of the possible to fix temperature which will give the best of the possible to fix the possible to fix the possible to fix the possible to a strong or nutritious feed and that a large mess must be given to make up in the nabit or enewing the oats as soon as it has taken the milk, for about that time it wants to do something, and if it is not confined in a stanchion or tied out of reach of another calf, it will consider the possible to the possible to the possible to fix the matter of the possible to the possible to

ngry after be kept absolutely sweet and clean." DAIRYMEN IN DEMAND .- A few weeks ago the Continental Creamery Co sent representatives to the Kansas Agri cultural College with instructions to en-deavor to engage the services of thirty men from the dairy school. Only sixteen men were available and positions were



The International Cream
Separator Co. Lancaster, Pa.

Reg. JERSEY CATTLE,

STRAWBERRY HILL HERD of pure bred Jerseys for Cream and Butter pur-poses. Calves for sale. Pure bred Borkshires. Pigs all ages. Pure bred Southdown Lambe and Angora Goats. Apply to

IT RUNS ITSELF constant supply of water. RIFE Hydraulic RIFE ENGINE COMPANY, 128 Liberty St., NEW YORK.

MAKE MONEY les Mfg. Co., Dont. B. Co



DRILLING MACHINER

Spring is Here.

All nature feels the impulse of field like in a part of the season. Every living thing is filled with joyous, irrepressible energy. Do you feel this way? You do if you are healthy. But if you are tired and listless;

if every duty is a burden, YOU NEED READ THESE LETTERS.

Gentiemen: have used two bottles of Micro-Germi blood purifier and it has proven very beneficial. I have been improving in health every day and I can recommend it to my friends and neighbors as one of the best blood purifiers that I have ever seen. Is stimulates the body to healthy action and makes one feel like a new being.

Respectfully, Mrs. T. J. Winders, Malta, Ills. I was entirely run down and troubled with severe pains in my back, and was requested to my Micro-Germi, and have now taken three botheles, and am happy to my it has done me an amount of good, and I who cheerfully recommend it. Mrs. Chas. Anderson, Elburn, Un.

Blood Purifier.

Spring Tonic and Scientific

Micro-Germi embodies the result of modern medical research. It is different from other blood purifiers. If others have failed to help you, Micro-Germi is what you need. Don't fail to try it.

THE MODERN REMEDY COMPANY, KEWANEE, ILL.

Horticulture.

HORTICUTURAL TALKS,

PROFITS ON STRAWBERRIES .- On

If I can clear 5 cents per quart on them I am pretty well paid for my work, but nothing more. Any price above that ney making. But if I were properly paid for all the work I have done, for what I have lost through others, I might now take the world easy. Will it pay to can strawberries for sale?

Yes, if you could get a price for them you ought to have; but there is so much trash canned and sold so cheap that you cannot compete with it. You can afford to can for your own use, not the little cleanings, but the best. We still have some of last season's putting-up, and they are almost as good as if fresh from the plants. In a month from now we may expect new ones, from which time there may be fruit here continually all sum-mer and fall. For winter the apples,

He writes that strawberries do well in that section, and he wants my opinion as to the profitableness of growing them extensively for the St. Louis market.

I will, like friend Husmann of California, in self-defense, give my answer in the RURAL WORLD, though I cannot give a satisfactory answer, as I never sent even a crate there except to friends. The St. Louis market is at times overstocked, and then there is a glut of ber ries. I sell all my berries in the towns along the M., K. & T. R. R. ROSA AUTUMN ON NUT PLANTING.

the attention of our young folks. I hope that she will continue to give us notes on horticulture, as well as her interesting ones in the Home Circle. Of course, I will be pleased to receive anything she sends ory trees, and this morning at the break fast table my sons were denouncing the act of cutting down the splendid tree which I have mentioned before. One said: What a splendid tree it might be now 'f it had been left standing." It was a foot

in diameter, and that was 20 years ago. lent correspondent, E. A. Riehl of North Alton, Ill., has started in the nursery business, and if the trees and plants he sent me, elegantly packed, are a specimen of his work, he can be depended upon. He and I made an exchange of stock, and both seem pleased with the trade. I met in Alton last fall, and was greatly sed with him. He remarked that he was gratified with making my acquaint ance, and was sorry that it did not hap pen sooner. If he follows in the footsteps of his enterprising father, he deserves success. SAMUEL MILLER.

Bluffton, Mo. And, by the way, RURAL WORLD readers are asking why we have not had any communications from Mr. Riehl late-

CANNON PEARMAIN APPLE.

Editor RURAL WORLD: In an agricultural paper some time ago I saw the Pearmain apple spoken of as a thing of the past. On my farm, on which I was born, there are still four old Cannon Pearmain trees, the last of quite a numper that have been on the place as far as I can remember. Two years ago. scions from these old trees and crown grafted them, and he has now possibly 200 hardy, vigorous young trees of this

I will say it is a winter apple, medium in size, slightly flattened at the ends, yel-lowish-green in color, nearly covered with red, and the whole apple is sprinkled, though not closely, with light colored specks. The flesh is creamy, rich, crisp and excellent in flavor. The tree is a heavy annual bearer. apple is entirely different from

any that I have ever seen of the winter Pearmains now sold by most nurseries. I have just set out a number of these oronard complete without them. I said the original state of the season and have never sold a tree in my life, but I can sell a the only berry grown for commercial limited number of these at 25 cents each. I send this article by request of the eda start in this variety.

JAS. D. CLARKSON.

Ballwin, St. Louis Co., Mo.

PICKING STRAWBERRIES.

Editor RURAL WORLD: With the boys run out we assign each picker as many rows as it is likely that she can handle A stake bearing her name is driven down, marking those rows and making them her property during the season on good behavior. If she is expected to bring her own berries to the packing places, she provided with a light stand holding eight or twelve quarts. We find that it hastens picking and lessens tramp-

enough for two crates—6i quarts.

With each picker assigned to her rows there is no confusion and no rushing Knowing that no one can pick on her row except by her consent, and that she will be held responsible for its condition, she not only takes time to pick it properly,

meddles with it.

The berries should be picked with stem about three-fourths of an inch long. This stem has wonderful power as a spring to prevent the berries from bruising each other by their weight during transporta-tion. It is best not to touch the berries

where they should be highest. Few or no clean it was when starting; my gin

correspondent asks: What should be the net profit on a quart of strawberries to ation they must always be picked cool. It is better to have them dry than wet ing; were the seeds cheap, like parsley, it business? Where refrigeration is to be used, it mat- ing close together in the drill would crowd whether hot or cold, wet or dry, res less whether not or cold, wet or dry, rovided they are put in the cars at nee, and that the cars have been iced ong enough to get thoroughly cold. This Vance Co., N. C.

PROFITS FROM STRAWBERRIES. The question of profits from the grow-ing of strawberries is one that is of much interest to many RURAL WORLD

ers that during the past few years there has been no profit in growing this fruit, mer and idil. For winter the apples,
pears and persimons will come into play.
There is no use in anyone in the country
et d to change a losing business into a
paying one. Assuming that the business BERRIES FOR THE ST. LOUIS MARhas not paid (in many case, we know it
has not, though in others good money
KET.—I am asked to give my opinion on
the advisability of growing berries for the
St. Louis market. The party asking for
the advice states that he is 75 miles
southwest of St. Louis, on the Frisco B the right side of the ledger; one is to this theory with. make the berries cost the consumer more, the other to make them cost the producer THE CARTHAG less. Some of our correspondents have advised that the increase in price to consumers be brought about by decreasing the area planted, thus decreasing the amount of fruit put on the market, and this resulting in an increased demand. Experience in other industrial lines has shown how difficult it is to control the out put of goods, and only by the formation of gigantic and far-reaching organiza tions has it been possible to do this. With along the M., K. & T. R. R.

ROSA AUTUMN ON NUT PLANTING.

That was an article that should attract as among farmers. We believe that there is little to accomplish in that direction for the relief of the strawberry grower who is finding that his crops are yielding him no profit. Much can be and is being done to sustain prices by preventing mar ket centers becoming glutted through large shipments which should have gone

> There is, too, much to be learned by the average strawberry grower as to how to reduce cost of production. On this and other phases of the problem of How to Make Strawberry Growing Pay, we wil be pleased to hear from our readers.

A hint is given by Judge Miller in this issue of one way to make the busines pay, and that is to look to near-by town for a market. It is a fact apparent to anyone who has looked into the matter, that, as a rule, the consumers in the smaller towns pay bigger prices for strawberries and other small fruit than do those of the large cities, and the quality of the fruit sent to the big mar-ket is usually much better than that offered in the local towns.

STRAWBERRY GROWING YEARS AGO.

B. F. Smith, one of the Kansas con-tributors to the KURAL WORLD, was, 2 years ago, 1873, growing strawberries 30 miles south of St. Louis. He says:

"Our first picking that year sold for \$15 per twenty-four quart crate, in St. Louis. The second picking brought \$12 per crate, the third \$8 per crate, and the last one sold for \$5 per crate. These were better prices than we expected that year in fact, better than we had ever received before or since. There was a great scar city of strawberries that season, and St Louis and Chicago swallowed up every thing in sight. Since coming to Law rence and before the invention of refrig rence and before the invention of refrig erator cars, we received \$7 for first ship ments, and four or five dollars per crate in Denver, for last pickings. But sine cold storage has come into successful operation, the growing and shipping of berries to the great markets of our country have been attended with small profits in fact, many cars have been sold for less than cost of freight and picking. It is hard for we older berry-growers to adapt ourselves to the new situation, but we must face the music. We are too old to drop out, we have been in the busi-ness so long that we are at home in the berry patch. Out of it, we would be like a fish out of water.

"Marvelous progress has been made in berries, their size, excellence and number of profitable varieties produced the past young trees. I would not consider my of profitable varieties produced the past orchard complete without them. I am not 30 years. When the writer began berry express shipment. Now, we have nearly for the benefit of any who may want two dozen valuable commercial varieties Within the past few years many new sorts have been introduced, very few of which have given satisfaction sufficient for their retention."

GINSENG GROWING.

In your issue of January 12, Mr. Kelsey of Boston, an interested dealer in ginseng plants, comes to the front in de fense of the ginseng culture fad, but it is only another case of "Save me from my friends," says a correspondent of "American Gardening." His defense is ame, for he admits the two worst trouble with this plant, i. e., its slenderness and its four to six year term of maturing; and he omits to give any opinion of why selves. This is done on carriers borne by so per cent of my young roots died withtwo men each, and each carrier holding enough for two crates—64 quarts. With each picker ansigned to her rows there is no confusion and no rushing. where it is to mature without taking the

occurred in my case.

He says that stratified seed will sprout but sees that no gad-about tramples or meddles with it.

The berries should be picked with stem about three-fourths of an inch long. This This plant is a species of parsley; we never think here of transplanting parsley, but sow it where it is to mature; it looks reasonable that the same rule

tion. It is best not to touch the berries with the hand in picking. This softens them. It is easy to handle them by the stems alone. The reddest side of each berry should be up. The cups should be up. The cups should be topped off attractively. I do not mean that all the large berries be put on top, but that good-sized, well-colored ones, evenly arranged, be used to top off with. Good pickers soon learn to do this neathy and quickly.

Cups should always be well filled and heaped a little, sloping to the center,

caps should show on the top.

beds were nicely spaded over and raked Strict inspection both in the fields and at the packing houses should see that it requires a strong sort of plant to rethe picking, etc., is properly done. A sist the weeds; some few ginseng plants scale of prises to the best pickers has some few ginseng plants wonderful effect. out the weeds a little, and the hoe could be used between the drills, but the seed costs too much to drill it in thickly.

He has made out the case of ginsen Is important. Cars should always be iced over twelve hours before berries are put in.

O. W. BLACKNALL. would say that I was after when I wrote you. There must be many men who bought, like me, small trial lots of the that will interest the public; how the ma jority of them have done or will do it readers. Profit is what we work for in strawberry growing as well as in other lines of farming and in other callings. It is asserted by many strawberry growa paying crop, or if it is to be relegated to the tomb where so many horticultural fads lie buried. It is from such men that I would like to hear.

I would like to hear.

Some way must be found to shorten the
six-year term; it has occurred to my mind
that it might be cut in half by the use
of hothouses with whitewashed glass for shade, thus giving it a double length of ng season, an interval for freezing taken as is done with roses; the plant can never become popular on the two ways of making the balance come on six-year basis. I own no hothouse to try

THE CARTHAGE, MO., LAWN CON-

tevens, Superintendent of the Carthage Mo., Public Schools, there has been de veloped in the city of Carthage a very active interest among children and cit izens in flower cultivation and yard decor ation. Under date of April 8, a corre pondent of the "Globe-Democrat" write

s follows:
"The best that is in man may b rought out through the fragrant pres of flowers in his daily environment. Flow ers in the homes create a love of beauty— the hope of the race. We seek to bring about the culture of flowers in every home, and then to develop a spirit favor ing public beauty and a love of outdoo

public schools of Carthage, who are now just entering upon the second annual contest for the best-kept lawns in this

This city has more than a local celebrity in the matter of attractive appear ance. It has long been known as the "City of Beautiful Homes," and the annual vine, flower and vegetable contest originated by Supt. Stevens of the public schools, promises to result in still greater beauty and attractiveness. The results in the flower contest this season promise to be even better than the flattering showing made in the initial contest las

All pupils in the public schools are per mitted to enter the contest, except the children of professional gardeners and florists. The children are urged to secure the assistance of older members of their families, the intention being to enlist the interest of all in the growth of the flow

Supt. Stevens states that, prompted by the experience of last season, some alterations will be made this season, the principal being that the winners of first prize this year will be excluded from the next contest, only one prize to be given in one amily, and two sets of prizes will be awarded, one to those having use of hydrants and one to those out of reach of

vegetable contest last year an the vegetable contest has year a number of boys raised a second, and some even a third crop. The thrifty lad who won the first prize in the vegetable department last year sold more than enough to pay him for all his work, beside supplying his family with an abundance of the choicest home-grown vegetable broughout the season

There will likely be from 1,500 to 2,000 children enter the contest, all of whom will have more or less help in their work from other members of their respective fami lies. The prizes to be awarded will for the most part be in cash, ranging in amounts of \$1 to \$4, and aggregating upwards of \$100.

The inauguration of the flower contes in Carthage last year attracted favorable notice all over the country, and many people journeyed here from considerabl distance to see the work done by the boy and girls of the city. Among the prom-inent people who were interested in the Carthage contest from abroad were: War ren H. Manning, landscape architect, Bos on; Mrs. Mary Rogers Mitler, instructor in nature study, Cornell University; Mrs. hive for the use it is intended. Bees also be fed a little warm syrup every frances Capley Seavey, landscape gardener, Chicago; Hon. L. D. Harvey, state the frames, and about in the inside of the cause the others must be supplied from superintendent of Schools of Wisconsin, and others. State Superintendent of Schools W. T. Carrington, of this state, building of burr combs as much as poswas particularly interested in the work sible no hives entirely prevent it. and asked for a statement of the work and its results, with a view of including the same in his annual report.

The present contest will cause about October 1. The inspection will be made at various times during the growing season, by committees of ladies selected from the various women's clubs of the city. The City of Carthage, being built in a natural and beautiful forest at the foot hills of the Ozark Mountains, and within a few hundred yards of Spring River, a sparkling clear-water stream fresh from the springs of the Ozarks, has all the natural advantages for the very best results from a lawn contest such as has been inaugurated. And with hundreds of earnest workers for greater beauty and at-tractiveness for the city, there is no danger of forfeiture of its title of "The

City of Beautiful Homes." TO DESTROY CURRANT WORMS. re is the proper remedy. Some it on dry. That is somewhat l. The most effective method of application is to disolve in scalding water and put a strong solution, about a spoonful for a pail of water. It will not do to apply once only. The eggs seem to be current bushes; there is danger that it



Our books, tellisest adapted for all GERMAN KALI WORKS, 03 Nassau St., New York.

"scrubby."

THE HONEST COURSE.-The seeds nay gain a temporary advantage; but such claims will not build up a lasting reputation. An honest course in dealing with customers is the only one any man can afford to follow, if he wants to do usiness in the future. The old adage that 'a pleased customer is the best adverent" applies as well to the busine

FEED THE BIRDS .- A close observe has well said that "birds have different tastes from men; as a rule they prefer bitter, sour or insipid fruit. We should ever destroy such species as the wild herry, wild grape, elder, blackberry, uneberry, mulberry, dogwood, virginia reeper, buckthorn, sumach, bitter-sweet, and others. By encouraging such plants we are approaching a solution of the problem, that will preserve for our own benefit both the cultivated and the birds." This is a point that we think many peo ple have overlooked. Where the birds are the most destructive is in localities whe in the farmer's garden.-Prairie Farmer.

CULTIVATING THE ORCHARD .- H.

Dean of Illinois says: I consider good

and thorough culture of the utmost importance in growing fruits successfully. First getting your ground in the best pos sible condition before setting out your plants or vines and then frequently stir. prants or vines and then frequently sur-ring and loosening the ground during the growing season. Now this is not only necessary during the growing season before your trees and vines come into bear ing, but especially is it true that during their fruiting the ground must be fre-quently stirred and kept pulverized, in orler to have the best results when gather ing your ground in a loose, pliable condi-tion you counteract, in a measure, the ef-fect of drouths and enable your fruit to keep on growing and to some extent pre vent their dropping. Another condition also noticed, between orchards cultivated and those not cultivated the last few ears, and one I think the fruit growe will fully appreciate is this: the orchard that have been down to grass for a num od crops of fruit as their owners say without any cultivation, are running down noticeably while those which have een thoroughly cultivated are impr every year. This is gratifying to the orchardist and looking at his orchard he mows he has been well repaid for all vork put on it. The fruit grower must watch his trees and ought to be able to tell whether his trees or vines are thriving as well as the stock man who goes around amongst his stock, can tell how his stock is growing. If your trees are not doing as well as you think they ought ou can improve their condition by judious fertilizing, and especially will it do conders on young trees.

The Apiary.

Hives become unfit for good manipu ation, and if not cleaned up every spring and put in good order, we lose a great part of their usefulness, writes A. H. Duff in the "National Rural." Bees carry in large quantities of propolis or bee glue, and plaster it over the inside of the hives and over the frames in such quantities that it almost disqualifies the frame

During the honey season bees frequently build out some of their combs in which they store honey so wide, that they can scarcely be placed back in the hives withscarcely be placed back in the hives with-out bruising the combs and killing bees. These combs should be trimmed down to the proper thickness by shaving off the surface with a sharp knife. The frames shape for good handling during the honey

we can clean up the hives nicely by beginning with a clean one and setting the frames with contents, bees and all, into it from another; then this one may be prepared for the next colony, and so on until the entire number of hives are put in good shape and with but one empty hive to start with.

This is the important work to be done.

This is the important work to be done in spring and should be done just after the weather gets warm and the bees are beginning work. Transferring bees from old hives into new ones, and all the work of cutting out and straightening up the of cutting out and straightening up the combs in the frames should be done at this time. Some who are not well posted become discouraged with combs that have turned black and think them worthless, but by no means is this the case, for after brood is reared in combs they all turn black, but are not impaired from usefulness.

current bushes; there is danger that it may poison the fruit. If dry heliebore is used in abundance it would be better to spray freely afterwards with pure water and thoroughly cleans the bushes.

TO DESTROY ANTS.—If you are troubled with ants in your gardes or orchard, and have falled to get rid of them, try kerosene. Wet the sarth to the distance of an inch around their holes with the oil, and then equirt some directly into the hole itself.

THE PROFITS IN THE BEE BUSINESS

One of the notable financial improve ents in diversification of a farmer, truck grower or dairyman, as well as the fruit grower, is the acquisition of a few colo-nies of bees, says G. W. Guyton in the Boston "Cultivator." By the addition of an apiary to any other business one can use spare time to good advantage and will hardly miss the time, to say nothing of the space occupied by the apiary. One need not own anything more than a good-sized lot for bees, as they forage for three or more miles around. Just let the other fellow furnish the range and perhaps, if he is an orchardist, the bees will help him in pollenising and crossing to his advantage.
Say a man invests \$5 in a hive of bees.

He may expect one or more swarms to issue in the early summer. We will say one. He can buy an empty frame hive furnished ready for the bees for \$2.50. By this time next year they may be valued at \$5, but are really worth double that. From the old colony he may get 100 pounds of honey or more, and he may not get over fifty. This is worth \$5 at 10 cents a pound, which clears the first cost of the bees. The new swarm may net him an equal amount, but say 25 ounds, which at 10 cents a pound, pays or his new hive. Now he is even as to avestment and two colonies ahead for the coming season's start. Sometimes the old colony issues two or three swarms and the first colony will issue one or two but this is not the best for honey produ

I will leave it for interested readers to gure this out for ten years, allowing the bees to issue one swarm each year the old ones yielding 50 pounds each and the value of the honey and the total number of colonies together, and see it they are not worth a small farm. I hav handled bees for 30 years in this country In January, 1899, I bought two colonies and in the spring had one new swarm From the two old swarms I took about 9 pounds, it being too dry a season for bees. Last year from the three I had about a dozen in the fall, but doubled back to nine.

ack to line.

From one of the first new swarms look off 95 one-pound sections, which lold to merchants at 12½ cents a section Sesides I extracted about 30 pounds from his same hive. This sold at 10 cents ound. I did not keep a record of what took from the other hives, but som of them never gave any surplus. They used the honey in rearing broods to swarm. I had some swarms in Septem-ber and one in October. These were no good, as it was too late for them to d nything. This year I expect to increase honey instead of casting extra swarms Besides, I will do something toward rais ing Golden Italians in nucleus hives. The way to start in the bee business is to be-gin at the bottom round of the ladder and to up step by step.

MATING QUEENS.

"How to secure pure mating of Queens question at hand. Since the intro general have been asking this same ques tion, and so far no satisfactory answe has been given, for the simple reason hat we have not absolute control of the nales with which queens may mate. One rouble is that neighbors may not care a reat deal about the purity of stock nence will have undesirable drones with which pure bred queens are likely to mate, says Wm. Russell in "Farm, Stock and Home." However, with movable frame hives, perforated zinc, and a little care on the part of the keeper, a good leal can be done to insure pure mating All attempts at having queens mated n confinement have proven failures. One nethod is to put entrance guards on all colonies having undesirable drones, and o prevent them from flying when young ueens are expected to mate, or try using drone trap, catching them as they at tempt to leave the hive. But traps inter seriously with the work of the col ony. Perhaps the best method known is to set aside one colony (having a tested queen) for drone rearing, and allow n drones in the yard except from that queen. In order to succeed with this all drone comb must be cut out from every frame and replaced with comb of the worker hive of cell, so that no drones will be raised except in the drone rearing colony. The colony must be provided with two or more frames containing droprepared combs must then be placed in the center of the brood nest where the queen is sure to lay first, and the colony tucked up nice and warm. They must the prepared ones. When part of th drone brood is sealed it will be ready to distribute to the other colonies, and mo prepared combs put in its place i tinued. An old queen will do a little better at such work than a young one abundance of males, so that nothing may surface with a sharp knife. The frames should be cleaned of propolis and burr comb, thus putting the frame in the best base for some frame in the best be attended to at the proper time, and the comb from which the drones have we can clean up the hives nicely by be-

> HOME CURE FOR KIDNEY TROUBLES.

queens mating with pure stock. Even a little missionary work among neighbors would have a good effect, queens don't cost much at swarming time, and a pres-

ent of a nice young queen might go

long way in inspiring a desire for in

The well known clothing dealer, A. S. Hitchcock, East Hampton, Conn., says if any sufferer from Kidney and Bladder Diseases will write him, he will direct them to a simple remedy that has cured many of his friends. He has nothing to sell or give, only tells you his experience.





A Self Feeder that Feeds

Can you think of any attachment to a threshing machine that would save you more money than a good self feeder and band cutter that will do the work reliably and well? It's sure to save you the hire of one man, generally two and not infrequently three or me You save their wages and board—no small item when you have a big threshing. Nichols-Shepard Self Feeder

is undeniably the most reliable and thoroughly good self feeder made. It is used on the Nichols-Shepard threshers only, and all of its advantages, therefore, accrue to the men who own and the farmers who reploy them. Note the special patented double truss which supports the bundle carried the service, reat, easy to adjust and high efficient. No legs, as in the case of others, to sink into the

SEEDS Cow Peas, vy hipp Wanted. Cow Peas, Whippoorwills

500 Dollars For One Ear of Corn.

1880. SOLD BY THE SEED DEALERS. For Pamphlet address
B. HAMMOND, Fishkill-on-Hudson, N. Y.

'Invincible, Unsurpassable. Without a Peer." Writes a regular subscriber, who has read it for many years, of the Twice-a-Week issue of the

St. Louis Globe-Democrat

and this is the unanimous verdict of its more than half a million readers. It is BEYOND ALL COMPARISON, the biggest, best and cheapest national news and family journal published in America. It is STRICTLY EXPURIENCES IN no littles, but it is above all A NEWSPAPER, and gives ALL. THE NEWS promptly, accurately and impartially. IT is INDISPENSABLE to the Farmer, Merchant or Professional man who desires to keep thoroughly posted, but has not the time to read a large daily paper, while its great variety of well-selected reading matter makes it an INVALUABLE HOME AND FAMILY PAPER.

Papers Every Week. Dellar For One Year. Eight Pages Each Tuesday and Friday. Sample Copies Free. GLOBE PRINTING CO., St. Louis, Mo. Rural World and Globe-Democrat—Either Address, both for \$1.50 Net

The Twice-a-Week Republic

Is the greatest and best of all newspapers. Its Telegraphic and Cable News Service excels that of any other paper. It prints the new news fully;

CONGRESS

and STATE LEGISLATURES are in session and questions of paramount issue are under discussion. Now is the time to subscribe for the best medium keeping in touch with the whole world. It is DEMOURATIO in politics but distinctly a NEWSPAPER and Family Journal.

THE SUBSCRIPTION PRICE OF \$1.00 gives you two papers each week 104 papers a year. It is printed every Monday and Thursday. Address at orders to

THE REPUBLIC, St. Louis, Mo. Rural World and Republic, either address, both for \$1.50 net.

STRAWBERRY PLANTS.

FOR SALE SOY BEANS—Dwarf tured and acclimated fresh, clean seed. Write to J. H. CHENOWETH, Lathrop, Mo. BEE HIVES, Sections, Smokers and all Bee-keepers now. LEARY CO., L

MONEY IN BEES. Send for our 40 page catalog FREE, Gives full information about bees, hives and all up-to-date supplies and methods. Address JNO. NEBEL & SON, High Hill. Mo.

SEED CORN Muns Yellow Dent. is the best stockmen to feed; has taken more premiums than any other corn; immense yield. Price \$1.00 per bushel, hags included. Sample and price list of field seeds froe.

A STRAWBERRY PATCH for \$5,00. Our high four combination offer, 20 piants, 55 each of following four fine varieties, Seaford, Star, Excelsior and Gaudy Son by mail or express to any part the United States, prepaid.
F. B. D. No. 3 Ernest Gauntt, Marion, Ind.

CYCLONE CORN HUSKER ROSENTHAL HUSKER CO. BOX# MILWAUKEE WIS

COW Peas. The Famou Forage Cro and Soil Improvers

WE ARE HEADQUARTERS for these and all Southern specialties, including Sola Beams Velvet Beams, Pearl or Cat-tail Millet, Teosint Bermude Grass, Ensilage Corn, Spanish Peanuts, Chuisa, Serghams, etc.
Write for prices, and our interesting Catalogugiving full information about these crops. T. W. WOOD & SONS, - Richmend, Va.

many of his friends. He has nothing to sell or give, only tells you his experience. In it more or less foreign particles that give it a dull or dirty color. If allowed a long time in cooling, it will be kept a long time in cooling, it will be kept a long time in that liquid state suitable for when rapidly cooled, as is likely to be the case with the inexperienced, it has mixed

FARMS.

GLT OUR FREE LIST of Farm Barge enliural, Mineral, Coal and Timber Land 331 Lincoln Trust Building, 3t. Louis

ESTABLISH A HOME OF YOUR OWN

Read "The Corn Belt," a handsome monthly paper, beautifully illustrated, containing exact and truthful information about farm lands in the West. Send 25 casts in postage stamps for a year's subscription to Tax Cons Bull, 209 Adams St., Chicago.

FARMS AT BARGAINS.

our miles from H. & St. Joe and M. K & T. R. St. Travel roads and rural delivery; also telephones in community: freight I cent per gallon on eream to "almyra Creamery. Soil it elim on "45% and 180 ceres, and black prairie on 200. One third off of ceres, and black prairie on 200. One third off of ceres, and black prairie on 200. One third off of ceres, and black prairie on 35% \$25.00 ceres, and black prairie on 35% \$25.00 ceres, while the ceres, while the same ceres, while the same ceres, while the same ceres of the cere

I CAN SELL YOUR FARM Residence or Business Property for Cash no matte where located. Send description and selling price and learn my successful plan of selling property W. H. GSTRAHDER, 1315 Filtert St., Palladelphia, Fa.

BURPEE'S SEEDS GROW. Hiustrated cate

GRINDSTONES. Direct from maker to user, 75-15, stone, diam-ser 30 inches, 82.50, '90 lb. stone, diameter 34 tohes, 83.50, Bither sits stone mounted, II.00 stra. These prices include cost of delivery as carest mirrod station. Write for circular P. L. COLE, Marietta, Ohio, Lock Box 391

RODS for locating gold and silver, lost treasures.

TEXAS ROD Co., Box 184, M., Dalles, Taxas.

TAPK TREES SUCCESS! WHERE Largest Nursery. O'T-HERS FAIL.

Fruit Road Proc. Routh of By junc's appring the STATE. STATE. Louisiana. Mr.; Benerville, M.E.

Live Stock.

SHORTHORNS. gril H.—C. C. Bigier & Son, Hartwick, form, and it.—Boone County Shorthorn Breedware Association, at Columbia, Mo. 24 March E. Jones & Co., and S. E. Prather & Son, at Springfield, Ill. HEREFORDS.

Eay H and 22.—C. A. Jamison, Peoria, Ill.; S. H. Godman, Wabsah, Ind.; and others, at Chicago, Ill. ABERDEEN ANGUS.

Earch 14.—H. M. Gittings, Disce, Ill. Earch 20.21.—Gardaer, Judy, Mattinson and Seeley, Kansas City, Mo. 25 March 20.4. Haley Bros., Harris, Mo., and others, at Kansas City, Mo.

CHARGES FOR SERVICE OF BULL

Breeders and raisers of fine stock know ful well the cost of obtaining valuable bulls with fine blood lines, and also the expenses attending the keeping of such animals, and hence are willing to pay the asked for the service of sires of pended by the authorities of Illinois good breeding and established excellence.
They know that it is one of the least expensive methods of securing a good herd. It is slow, but when capital is not avail-

good buil or heifer caif sired by a buil of known value is a long step towards the realization of his dream, and he is willing to pay for the service of such a buil. He will do this, too, when to the uninitiated the charges seem high. Though there are one farmers who are prone some farmers who are prone to regard the breeder who insists upon collecting charges for the service of his bull as un-neighborly and close fisted. And rather pay the charge they will breed to some free scrub bull and raise scrub stock to sell at scrub prices, and then bemoan

Estimate the cost of keeping a good bull, the interest on the money invested in him and determine if a man is not justified in making charges for his service. The proper business view to take of the tion is to give support to the man a vicinity a good sire of established breeding by giving him your patronage and promptly paying the charges on the prounder which the contract was made. Such procedure will encourage the introduction of good stock where now there is a dearth of it.

AN APPEAL TO BREEDERS.

The committee representing Poland Chinas, composed of B. D. Burnham, H. H. Kirkpatrick and Frank D. Winn, makes an appeal to the Poland-China breeders throughout the United States for help in making the Kansas City Swine to be held next October the greatest success it promises to be with the sup-port of the liberal spirited breeders of the United States.

position of the Poland-China breed Yards Co. offered \$500 to each breed on on that this amount be duplicated condition that this amount be duplicated by each breed, the Berkshire and Duroc Jersey Record Associations made the guarantee, while the \$60 of the Poland-Chinas had to be guaranteed immediately by the three members of the committee. The committee wishes it to be distinctly understood that all the work they are dounderstood that all the work they are do connection with this show is enirely gratis and that in addition to this the current expenses which have to be met are being taken care of personally and will hope to be until after the show, besides this each of the three mem-has made a liberal subscription to only to form but also to disposition.

would not be fair to even think that the breeders of the country who will derive as much good from and who should be as much interested in this show as the oommitteemen, will refuse to aid this great undertaking. The \$3,500 to be raised for the state fair list is about all provided for and a good portion of the \$2,500 for specials to be raised by the breeders considerable to be raised which can be true standard he may undo in one gen done easily by a little help from each. It tion what he has effected in another. done easily by a little help from each. It is not expected that breeders living at a list has whirled about in an eddy which distance will give a large amount; but any one can afford to give something and provement. committee wants it understood that offered will be gratefully ac-

\$10, and if not \$10 then give \$1. There are TRY contains a vast amount of inform the money; but there are few breeders who could not afford to give at least \$5. breeder will return same without some-

the state fairs have cut the premium list down on hogs until no exhibitor can win enough money to pay expenses, and it is due to the three members of the committhe who are working untiringly to make this show a grand success that when the subscription blanks are sent around that a donation of some kind be made. This is breeders' show and nobody but the will be benefited and each should

There is a friendly rivalry between the two breeds as to who will make the best show and have the most attractive pre-mium list. Will the representatives of the great breed of Poland-Chinas stand still and see their favorite outdone? Conthis when filling out your subscrip

THE WM. WALKER SALE of Shorthorn cattle and Poland-China hogs at Pana, Ill., April 26, was fairly well atout of the county. The purchasers did a good deal better than Mr. Walker. Seventeen head of cattle brought \$1,455, an average of \$85.58. Twenty-three head of September pigs brought \$359.59, averaging worm (Sclerostome pigs brought \$359.59, averaging worm (Sclerostome pigs brought \$259.59).

Calf Scours Calf Scour Cure and Cured Digestive Powder do the work. Severest cases cured. sises) \$2.50. Sent to any railroad express point in U. S., 25c. extra. C. I. HOOD & CO., Montion this Paper. PROCLAMATION

ding the Operation of the Regula tions Contained in the Proclamation of the Governor with Reference to Tuber culosis Among Breeding Cattle, Issued on the 18th Day of June, 1900.

Executive Department, State of Missouri,
City of Jefferson.
By authority vested in me and in accordance with section 10,551 of the Revised Statutes of 1890, I. A. M. Dockery,
Governor of Missouri, having approved
the following order of the Board of Agriculture, rescinding the quarantine regustions with reference to the introduction lations with reference to the introduction nto Missouri of cattle (cows, bulls and heifers) for breeding purposes, do hereby promulgate the same and order that the same be in force from and after this date. Whereas, It has been made known to the State Board of Agriculture that the quarantine regulations, with reference to tuberculosis among breeding cattle, adopted by a joint meeting of the Live Stock Sanitary Boards of Illinois, Kansas, Texas and Missouri, have been sus

Kansas, and, Whereas. The enforcement of the afore said regulations to be effective and satis-factory should be jointly maintained

It is slow, but when capital is not available, a man must be content to make the
best of his circumstances, and herein lies
the key that unlocks the gateway to success whether one has money or not to
purchase foundations for a herd.

The young breeder of limited means, but
who is energetic and is desirous of grow
ing into a berd of fine stock knows that
a good bull or heifer caif sired by a bull
of brown yelles is a long step towards the
form yelles is a long step towards the

By the Governor.

(Seal) SAM B. COOK,

Secretary of State.

SELECTING ANIMALS FOR BREED-ING PURPOSES.

This is an all important matter and on that has never received from the farme the attention which its importance de mands, writes W. J. Kennedy in the "Live Stock World." It would be putting it mild to say that it has never received a tithe of the attention of which it is deserving. and When directions are given for selecting breeding animals they generally refer to males rather than to both males and fe-males. Now it is quite proper to lay much stress on the selection of suitable males. It is quite proper to hold it up as being more important to make a careful choice of males than of females, but a careful selection of females should in no wise be overlooked. It is probably tim that more care is exercised by breeders of grades in the selection of females than by those who breed pure breds. The reasons for this are found in the anxiety on the part of those who breed pure breds to turn them all into money at prices in advance of those which represent their meat values. It should not be so. It cannot be so without working injury somewhere. If the animal is sold for breeding, the reshow is most unfortunate in hav-association or record company be-When the Kansas City Stock of the bord force of the b sold but kept to breed from, the progress of the herd, flock or stud in which it is retained will be so far hindered. Advice is fully given by way of urging our breeder to castrate all males which are not up to the standard and such advice is good; but it should not be forgotten that it is very important also that breeders should be reminded now and then of the important of discarding all females

has also reference to pedigree and per formance of ancestry. have in his mind and well mapped out, the form or type of an animal which he de-sires to breed. This image, though only existing in the mind should be as clearly defined as though it were transferred to canvas. He is at sea when he attempts to select unless thus equipped. Without has already been pledged, but there is yet being able to select with reference to a

purposes not up to a given standard. Se

lection may be said to contain, in germ at

many considerations. These relate not

least, the art of breeding. To be able to dividually. Look up Mr. Gentry's adverselect well, generally speaking, means to be able to breed well. It involves a great bargains. They are worth looking after.

(To be continued.)

THE SIXTEENTH ANNUAL REPORT OF THE BUREAU OF ANIMAL INDUSthousands of Poland-China breeders, and tion upon the various lines of the work of even \$1 from each would more than raise the money; but there are few breeders especially helpful. The table of contents. who could not afford to give at least \$5.

The subscription blanks are now being ly has animal husbandry been treated:

Contents.—Report of the Chief of the Bureau-Experiments with Texas fever and Southern cattle ticks-Some examples hing filled in.

The record companies have practically of the development of knowledge concerned to take an interest in the show, cerning animal diseases—Administrative cerning animal diseases—Administrative work of the Federal Government in relation to the animal industry—International congress for the consideration of the best methods for checking or curing the beroulosis—Second outbreak of maladie du coit in Nebraska—Culture media for biochemic investigations-A report up an examination of milk—Report upon ex-perimental exports of butter, 1896-99perimental exports

Dairy development in the United States—
Notes upon dairying in California and the exports of California butter to the Orient—Statistics of oleomargarine, oleo
Orient—Statistics of oleomargarine, oleo
Orient—Statistics of oleomargarine, oleo
Orient—Statistics of oleomargarine, oleo
Dairy development in the United States—
tate T. J. Walland,
N. H. Gentry Combination Shorthorn sale, held at Kansas City, Mo., on April 22-22, was well attended. Representative breaders from Iowa, Nebraska, Missouri, receased. The ports of California
—Statistics of oleomarga.

dilled cheese—Foreign markets and poultry—Disposition of dead anis in foreign cities—Hog raising in the ath—The manufacture and exportation fassio, or jerked beef, by the River lata countries—Trade of Porto Rico in animals and animal products into the United Kingdom—Imports and exports of animals and animal products into the United Kingdom—Imports and exports of animals and animal products.—Number of live stock in foreign countries—Some agricultural experiment station work—Conneg diseases of animals in foreign fast of the kings of the ki eggs and poultry—Disposition of dead animals in foreign cities—Hog raising in the
South—The manufacture and exportation
of tasajo, or jerked beef, by the River
Plata countries—Trade of Porto Rice in
individuals lacked the flesh to bring near
inflammation of the bowels and to rheum-

mals, 1839—The world's wool clip, 1839— Farm animals and the markets—Rules and regulations of the Bureau of Animal Industry Issued in 1839—Laws for the control of contagious diseases of animals— Miscellaneous information. This is a Congressional publication and

but a limited number is assigned to the partment, the remainder being for distribution by Senators, Representatives and Delegates in Congress.

This publication contains 790 pages and can be procured for 85c, cloth bound, by ending to the Superintendent of Docu-Executive Department, State of Missouri ments, Union Building, Washington, D. C. . STOCK NOTES

LOSSES OF STOCK .- Cheyenne, Wyo., April 24.-The Swan Land and Cattle Company, an English concern, lost 2,000 cattle in the recent storm and its animals are dying at the rate of 100 daily along the Wyoming-Nebraska line. Range feed is scarce and it is difficult to get hay to the weakened stock. Dead carcasses are found in canyons, gulches and under banks of streams and the stench arising from the decaying flesh is carried over great stretches of the country by the There is a scarcity of range food there and hay is selling at fabulous

J. P. VISSERING, Mellville, Ill .- Dear Sir: The Aberdeen-Angus bull "Captain" arrived here O. K. He is fully as good as represented and I am well pleased with him. He is certainly fine. Every one that has seen him says he is the best bull they ever saw in this country. He will certainly sire market toppers.

Thanking you for your generous treatment, I am respectfully yours,

J. C. CAVE.

Edna, Kas., April 26.

W. D. Shultz, Oklahoma, a load of light mixed hogs that sold for \$5.77½. Geo. Wood, Missouri, a load of mixed hogs at \$5.85.

J. L. Price, Indian Territory, a car load of mixed Indian hogs at \$5.75. W. H. Casey, Missouri, a load of good weight hogs that topped the market at

L. A. Keys, Indian Territory, a mixed load of hogs at \$5.80. Hogan Mercantile Co., Indian Territory, load of light mixed hogs at \$5.77½. Ratliff & Housman, Missouri, a load of

mixed packers at \$5.85. N. H. GENTRY, Sedalia, Mo., renewed his advertisement of Shorthorn cattle, Berkshire hogs and jacks for another year. Mr. Gentry has a national reputation as a breeder of high class stock and has been able to win prizes in the great est shows in America. He sells good ani-mals worth the money. For example, he sold his first prize bull calf at Kansas City Show last fall to Col. W. A. Harris of Linwood, Kan., for \$400, and he was resold at the combination sale April 22 by Col. Harris to Capt. W. S. Tough, Kansas City, Mo., for \$1,125-a very good profit Mr. Gentry sold Kirklevington Duke of Wooddale 121760 to June K. King, Marshall, Mo., as a calf, for \$145. Mr. King in five years has sold \$7,000 worth of his get at private sale, and on April 22-22, at the combination sale, he sold 15 more of his get for \$3,900, and has several left at home, and the old bull was sold to that enterprising breeder, M. B. Guthrie, Mex-

co. Mo., for \$1,000. He is a grand bull in

T. F. B. SOTHAM, of the Weavergrad Breeding Establishment, Chillicothe, Mo., reports the following recent sales: To the Chouteau Land & Lumber Co., of Southeast Missouri, 224 high-grade Here-ford heifers. These go to establish a highlass steer breeding nerd in a practically new territory. By the use of a bulls and these high-grade cows, pany, under the management of Mr. Griff Glover, expect to build up a high class herd from which to furnish the feeders of the Mississippi Valley, with the highest quality of steers for feeding purposes. To Mr. J. B. Fernow of Ohio, Mr. Sotham has sold the Rome: Lord Wilton cow, Molly, and calf, by the Sunny Slope bull, Orestes. To Mr. J. T. Bend, of Nebrasks four highly bred registered Hereford cows, and to Mr. G. D. Bernard of South Dakota, the Corrector bull Wishable. Mr. Sotham says that the trade in Hereford known in the nistory of the breed. Not only has there been larger transactions than have ever heretofore been made, but there have been brisker sales by the smaller holders than have ever heretofore characterized the Hereford business Among recent purchases made by T. F. B. Sotham are five bulls and ten females from Messrs. Hartman Bros., Gallatin, Mo., and seven bulls from Jno. G. Thomas, Harris, Mo. Mr. Sotham has recently added to his acreage at Weavergrace, and with more pastures and other enlarge ment of his facilities, he is in the market at all times to buy and sell first-cla

Herefords. THE J. K. KING, Gentry Bros animals that brought \$100 or over and lockjaw may be present when there is no names of buyers:

Kan.

20. M. Joplin, Longwood, Mo.

22. John Burrus, Columbia, J.

23. Capt. W. S. Tough

24. Capt. W. S. Tough

25. M. B. Guthrie

T. B. Rankin, Tarkio, Mo... C. C. Bigier & Son F. M. Marshai N. H. Gentry H. O. Linhart, Lohman, Mo. Abe Winger, Albion, Mc. Capt. W. S. Tough T. B. Rankin E. L. Wilford, Morton, Mo. L. DeVait, Olathe, Kan L. DeVait, eValt, Olathe, Kan.
eValt
Williams, Fairmount, Kan.
Gilbaugh, Trenton, Mo....
Stratton & Son.
J. Stratton & Son.
J. Stratton & Son.
Frinkman, Great Bend,

Kan.

Z. G. D. Stratton & Son

Z. G. D. Stratton & Son

Z. Ben Ashby, Arkadelphia, Ark.

4. C. S. Warner, Tecumseh, Neb.

John Burrus

7. W. P. Harriman & Son, Pilot
Grove, Mo.

3. C. F. Wolf & Son, Ottawa, Kan.

79. G. D. Stratton & Son

80. C. D. Bellows

41. D. J. Dawdy & Co.

Bellows
Dawdy & Co...
Brinkman
y Bartle, Versailles, Mo...
Shelby, Westport, Mo.... Sheiby Bartle, Versailles, Mo.
S. S. Shelby, Westport, Mo.
John Burrus
C. E. Leonard, Bellaire, Mo.
C. S. Parker, Aulville, Mo.
J. T. Harris
J. G. Brinkman
Smith Bros, Carthage, Mo.
Capt, W. S. Tough
John Hudglus, Mooresville, Mo.
John Morris
F. M. Marshal
Otto Gilbaugh
T. B. Rankin
H. R. Clay, Plattsburg, Mo.
D. L. Dawdy & Co.

The foregoing is a copy of a letter just received by the veteran Angus breeder, J. P. Vissering, Melville, III. In sending it he says that he has more of bulls just as good. His motto is: Top quality, bottom prices.

REPRESENTATIVE SALES.—Following are sales made by Evans-Snider-Buel Co. in Kansas City:
J. F. Schmid, Kansas, two loads of 1,020 lbs. western cattle that sold for \$4.90, an extremely good sale for this weight of branded cattle.
Fred Matthews, Kansas, a load of mixed packers at \$5.77%.

Vennard Barrett, Oklahoma, light hogs at \$5.70.

Veterinary.

Answers to questions in this department are given by Dr. T. E. White, former State Veterinarian for Missouri. Sedila, Mo. Write questions on enside of paper only, and separate from other business. Those wishing a written reply privately must accompany their requests with a fee of one dollar, the professional opinion being one of private advantage. ing on the top.

WAVING OR WEAVING IN A HOG .-I have recently bought a male hog that does not act right. He was roughed through on little and poor feed this winter. He is 10 months old. On going to his pen to feed him he will stand and swing his head to and fro and will keep up this swaying of his head until feed is given him. He does not squeal as other hogs

Nervous hogs that have not received a afficient amount of nourishing foods while growing often acquire the habit of swinging the head to and fro. Horses and mules are often seen with this sam habit when idle. It is not a disease,

ame when they are about four to eight weeks old. They swell in the hock joint of both the hind and front legs. I had one two years ago that was lame in three legs; he lingered along until fall and then died. These lambs get better for a few days at times and act as if they had rheumatism. I dip my lambs every year and it seems to help the lame ones a little. I bathed their legs with turpentine but it didn't seem to do much good. I lost two last year that were affected in this manner. They died after I had taken them from the ewes in the early fall.

Carroll Co., Ark. OWEN OWENS.

This disease is due to an inflammation of the envelopes of the navel cord. For some reason at present unknown the navel ord remains open after the birth of the animal; septic germs entering this open-ing pass to the liver and other organs through the blood stream and finally settle in one or more of the joints, causing them to enlarge. The lamb or other ani-mal so affected acts sin lar to one that is affected with joint rheumatism, when in fact it dies of septic poison. There is no sure remedy. The plan is to prevent. This is done by carefully ligating the nave ord the minute the animal is born and before it is snapped asunder from its mother. Carbolized vaseline should then

body is stiff, having no fever, but seems 1,036 pounds average sold at \$3.10 to \$4.80, to be cold. They last three or four days and then die. We have had six days of \$3.00 to \$4.00. Mississippi and Louisiana lambs and docked the ewe lambs just before these rains. I am feeding corn fodder with corn in it and sheaf oats, with
plenty of good hay. I lost one last year
and lights ruled 5 to 10c lower. Conditions in dry weather that had not been cas-They seem able to suck when the ewe. A READER.

the internal viscera when the animal is day the market opened weak to 5c lower this way only can reliable advice be givatism affecting the heart. Tetanus or locking of the jaw. Successed by castrating.

GASTRO-INTESTINAL CATARRH. My neighbor has lost a cow that had been sick 18 days when she died. The first 10 days she had black scours very tad. 15 to \$4.35, best lambs clopped forces was really the result of a fight bed. It was then found that she had hollow tail, the tail being hollow about Monday, April 29. CATTLE—Receipts took the position that public lands could 8 inches from the end. She would not eat anything from the time she first took sick, but would drink about two gallons time, groaning as though she suffered very much. She has been fed on good timothy and clover hay with corn twice a day, and had good pond water to drink.
John Listhers such a disease as hollow tall among cattle? If so, what is the remission of the control of the control

tion. Catarrhal diseases of the aliment ary tract are very fatal to all animals and should only be treated by an expert prac-titioner. Hollow horn, hollow tail, wolf tail, etc., are all mythical ailments. When an animal is sick with any acute or chronic fever there is a blood stasis o this means that the proper amount blood does not reach the other, as ther is just so much blood in the animal the natural consequence is that when ill the parts that normally are the least nour-ished at such times lose their share—as the tail, for instance, leaving that mem-ber in an almost bloodless condition. Hollow horn is another imaginary dis-

Hollow horn is another imaginary dis ase that has lost its hold since the play of dehorning has been so extensively tried, for every stockman now knows that the horns of cattle are normally hollow. ST. LOUIS NATIONAL STOCK TARDS.

MarketReport Furnished by Evans-Snide

Receipts for week ending April 27 we 10,966 cattle, 33,589 hogs and 19,733 sheep, against 9,797 cattle, 37,318 hogs and 13,518 sheep last week. As compared with cor-responding week year ago cattle in-creased 5,000, hogs decreased 3,500, sheep increased 6,300. Receipts in round num-bers at four leading western markets were 108,500 cattle, 313,100 hogs and 142,300 sheep, against 106,400 cattle, 283,200 hogs and 149, 800 sheep last week, and 99,000 cattle, 289, 800 hogs and 113,900 sheep corresponding week year ago.

CATTLE-Receipts in the native divis on were not quite as heavy as last week, there being a little heavier run than last week in the Texas division. Prices on nearly all classes suffered a decline, bu general conditions of the market were in very good shape. Beef steers, unless they were strictly fat and of good quality and handy weights, figure a decline of abou 10 to 15c, while butcher cattle show a de-cline of about 10c. Desirable stock steers and feeders held about steady, but the plain and common ones ruled slow and plain and common ones runa dull, and prices were irregularly lower, eVal calves finished up with top for week eVal calves finished up with top for weel of \$6.00, bulk \$5.00 to \$5.75. Bulls did no how much change, and milk cows re natined in active demand at full stead prices. Quotations based on the presen condition of the market are as follows: Best native beef steers, strictly fanc attle, 1,300 to 1,600 pounds average, \$5.77 o \$6.00; choice export steers, 1.300 to 1.600 ounds average, \$5.60 to \$5.75; oing and export steers, 1,300 to 1,600 counds, \$5.25 to \$5.50; fair to medium ship

ping steers, 1,300 to 1,450 pounds, \$4.85 to \$5.20: the bulk of the native beef averaging 1,300 pounds and upwards were of good quality, sold at \$5.06 to \$5.35, and the top was \$5.85 for 1,484 pound offerings Steers, 1,200 to 1,290 pounds average, full range, rough to best, \$4.40 to \$5.25, bulk of sales at \$4.90 to \$5.20; steers, 1,000 to 1,190 pounds average, full range, \$4.35 to \$5.35. bulk of sales at \$4.80 to \$6.15; steers ing less than 1,000 pounds full range \$3.46 to \$5.25, bulk sold at \$4.40 to \$4.85. Feeding steers, fair to choice, 800 pounds and up wards, \$3.50 to \$4.85, the bulk at \$4.10 to \$4.60, and they were fair to good quality; common to choice stockers, \$3.00 to \$4.75, bulk at \$4.00 to \$4.85, and the quality was medium; stock heifers full range \$2.65 to \$4.20 and the bulk at \$3.10 to \$3.75. Fancy there were very few on the market; choic native heifers sell at \$4.50 to \$4.80: native cows and helfers sell at \$3.65 to \$4.50; medium cows at \$3.15 to \$3.60; fair cowq \$2.60 to \$3.10; inferior, light and old cows \$1.50 to \$2.50; the bulk of the South west cows sold at \$2.65 to \$3.60 and the bulk of all the cows sold at \$3.00 to \$4.00 Canning cows sell at \$1.25 to \$3.00. Vea calves, full range, \$3.50 to \$6.00 per 10 pounds, bulk at \$4.85 to \$6.00 pounds. Heretics and yearlings sold at \$2.25 to \$4.15 per 100 pounds, with the bulk at \$3.00 to \$3.50. Bulls, ful range, \$3.00 to \$4.25, bulk of sales \$3.40 to \$3.75; stocked bulls sold at \$3.00 to \$4.00, the bulk at \$3.0 to \$3.70. During the week the milkers sold

at a full range of \$25.00 to \$62.50 per cov and calf, the bulk of sales being at \$32.0 to \$40.00. Receipts in the Southern division were about the largest of the month, there be ing 250 cars. Values were about stead; on the desirable, light weight butcher steers as compared with the close of last week, but about 15c lower than the best time. Grass cows are 5 to 10c lower, while fed cows and bulls were practically the

During the week Texas and Indian Territory steers 660 to 1,372 pounds average sold at \$3.2 5to \$5.25, (with the bulk at \$4.15 to \$4.76); cows and helfers at \$3.00 to \$4.70, SICK LAMBS.—My lambs are dying the bulk at \$3.25 to \$3.50; stags and walk with a disease which I cannot seem to disgnose. They lose the use of their legs calves 200 to 300 pounds average at \$9.00 to \$4.25 and lie flat on their sides. The whole and lie flat on their sides. The whole 1,036 pounds average sold at \$3.10 to \$4.85, bulls and oxen at \$10.00 por head. Arkansas steers 769 to 7 breed pure bred cattle and hogs, my hose of patrons say I knew how to sell them. Write the part of the same of damp weather. I castrated the buck steers 735 pounds average sold at \$3.65.

were more favorable Tuesday bulk of the hogs sold 2½ to 5c higher Unfavorable advices from other points en There is but one way to get advice that abled buyers to force a decline of 5c Wedis satisfactory for those of our corre-needay. With moderate receipts Thursday spondents who have animals die from a seemingly obscure disease, and that is to make an examination or investigation of but closed weak. With moderate run Fridead and note whatever looks abnormal and closed 5c lower. Good lights did not With a fairly liberal run Saturday the market averaged a shade lower. We quote following prices: Butchers and packers \$5.90 to \$6.05, Yorkers and shippers \$5.75 to \$5.90, heavy pigs \$5.25 to \$5.70, light pigs \$4.25 to \$5.25, rough heavies \$5.00 to \$5.75. SHEEP-Receipts for week just ending have been fairly liberal, and a de

were light here to-day in native division, but pretty liberal in the southern division. Prices are generally called 5 to 10c lower

The "black scours" indicate that the cow was affected with a liver trouble which finally caused intestinal complica-



Grand Duke of Haselhurst 198464 Grand Duke of Haselburs 198065, assisted by Waterloo Duke of Cedar Vale 188065, heads our herd of pure Bates and Bates topped pure Soutch and Scotch topped cows of the most fashionable

Stock for sale at all times at reasonable prices. Parties met at train. Farm TELEPHONE NO. 80.

SHORTHORN BULLS FOR SALE!

SHORTHORNS, BERKSHIRES and JACKS Shorthorns Scotch or Scotch Top and Bates mostly. Herkshires best blood in America and England Stock of all ages and both sex for sale. Call on or address.

H. H. GENTRY, SEDALLA, MO.

ST. LOUIS NATIONAL STOCK YARDS, THE LIVE STOCK MARKET OF ST. LOUIS. d at Bast St. Louis, directly opposite the city of St. Louis, appers should see that their stock is billed directly to the

National Stock Yards.

SCOTT & MARCH, Breeders of...... Registered Herefords.

"Pasteur Vaccine" SAVES CATTLE FROM

BLACK LEG

Nearly 2,000,000 successfully treated in U. S. and Canada during the last 5 years. Cheap, safe and easy to use. Pamphlet with full particulars, official endorsement and testimonials sent FREE on application.

Pasteur Vaccine Co., chicago.

HEREFORDS GUDGELL & SIMPSON 600 HEAD IN HERD. Independence, Mo.

Shorthorn Cattle Bates and Bates Topped. As good blood as the breed contains. Imp. Nonparell Victor 182973, Imp. Blackwatch 183834, Grand Vis for 15753 and Windsome Duke 11th, 121622 in service. Young stock for sale. Come and see or address. GEO. BOTHWELL, Nottleton, Mro.

CRYSTAL SPRINGS SHORTHORNS



HEREFORD CATTLE!

N. E. MOSHER & SON, Salisbury, Mo 100 Head Shorthorns

n herd; young stock of both sexes for sale. The ruickshank bull Duke of Hardson 133967 s ead of herd. W. H. H. Stephens, Bunceton, Mo I will sell the Hereford Bull, Sir Heeiod 87098 andson of Corrector and Heeiod 26. Alse il B. G. Sicola Bandelsand Dear Tod (1979). Alse C. Sicola Bandelsand Bull Physics Doar. Stock and eggs from high-class Barand, Bull Plymouth Books and White Leghorns.

Ed. C. Weeks, Eldon, Mo.

AUCTIONEERS.

JAS. W. SPARKS, Marshall Mo.

J. WEST JONES, LENOX, IOWA, and CAREY M. JONES, DAVENPORT, IA IOWA'S LIVE STOCK AUCTIONERS.

R. L. HARRIMAN, Live Stock Auetic Bunceton, Mo Up-to-date in every particular. Am selling for the best breeders in the country. Terms low. HARRY GRAHAM, CHILLICOTHE LIVE STOCK AND GENERAL SALES.

AUCTIONEER.

Special agents of the government land epartment are now sending out notices to the cattlemen to tear down their fence in accordance with the ruling made b the department last year, says the "Denver Field and Farm." The other day J. fence twenty miles long. The cattle tried recently to get an extension of time away. It is a crime to fail to have fence torn down within sixty days from the time notice is served. While the 20 to 30c was forced. The bulk of the recipits consisted of Texas sheep of good flesh, which are selling from \$4.25 to \$4.25.

We quote following prices: Best sheep small cattleman. The order to remove took the position that public lands could not be fenced and ordered all fences around ranches in which any public lands were located torn down. sick, but would drink about two gallons Prices are generally called 5 to 10c lower of water per day. She lay down all the time, groaning as though she suffered wery much. She has been fed on good timothy and clover hay with corn twice a day, and had good pond water to drink. lower. And their market steady to 15c lower such a disease as hollow tall among cattle? If so, what is the remedy?

Macon Co., Mo.

Were located torn down. We all know how the fences retard the growth of the country; that homesteaders can not settle on lands fenced, for it always means a row with the cattlemen who have built the fences. This is the very reason why were against the land-leasing policy of the American and the "national" live stock associations, which, as every one knows, are owned and controlled by the light fellows to the detriment of the common herd.

Shorthorn Cattle,

iks for sale at reasonable bulls Violets Prince 1450 JOHN MORRIS, Chillicethe, Mo.

A DEHORNER The proper dehorner is a Polled Durham Bul rite or call in reference to same, G. W. JOHNSON, Lexington, Mo.

Aberdeen-Angus Cattle. Hero of Estill 3d 20000 by Heathen Lad 2d heads se herd. Leading families. For sale: Choice oung buils and females. Watson Bros. Judson, ullivan Co., Mo., J. T. WATSON, Mgr., E. B. Sta. farris. Mo.

H. A. BARBER.

Shorthorn Bulls For Sale! RAVENSWOOD HERD

SHORTHORNS

125 head in herd. 20 bulls for sale from 6 to 15 mo old. Scotch and Scotch toped. Herd headed by (Lavender Viscount, 12475), the champion Short horn bull of the Kansas City Show, 1999. C. E. LEONARD, Bell Air, Mc. BD. PATTERSON, Manager. B. B. and telephone station. Bunceton. Mc.

ENGLISHED POLLED CATTLE fine stock. By your orders solicited. L. K. HABELITINE, Derchester, Green Co., Mo.



SHORTHORN CATTLE, e Hogs, Angora Goats, Light Brahma and Seabright chickens. Stock and eggs for Call on or address
J. J. LITTEBLL, Sturgeon, Mo.

CATALOGUES for Shorthorn sajes com or furnished complete at attractive prices. Address THOS. P. HALL, Breckenridge

From the best imported and native strains. Farm situated 2 miles from station; telephone as farm. Visitors met as depot if desired. Correspendence solicitied. Young stock for eale at all times. W. G. SWINNEY. Bots D'Arc. Mo., Greens Co., on Memphis R. R.

SHORTHORN CATTLE was tops selected from best blood known to the breed, and Poland from best bloed known to the breed, and Poland. China hogs of the most approved strains, extra good yeung cattle and hogs for sale; write you wants; visitors welcome; farm adjoining town on K.C., Ft. Scott & M. Iky. S. W.COX. S. Greenfield, Mo

Shorthorn Bulls. inals and good pedigrees. Write for prices.
W. H. FULKERSON & SONS,

AVONDALE GALLOWAYS. A few bulls of serviceable age now for sale. Car spare a few females, 100 in herd. Otto H. Swigart S. end State St., Champaign, Ill.

H. W. KERR,
BREEDER OF RED POLLED GATTLE.
Good young bulls for sale.
Carlinville, Ill.

Camp Creek Herefords.
Young stock for sale. Come and see me.
LOUIS WEHRMAN, Truxton, Lincoln Co., Mo

ZENOLEUM Kills Lios, Ticks, Mitne, Pleas, Etc., on all Liefs of animals and posity. Given constantly in drives out wwws. Cure all costs, wreath, owner, other constantly in the constant of th

Horseman.



The Grattan farm's youngsters will be ma. Ala., to the mile track at Springfield, Ill., May 7, where the stake-engaged colts will finish their education, the others going to the farm at Prairie View, Ill. Trainer Nickell expects to have a starter on edge for both divis-ions of the Kentucky Futurity.

Willis O. Foote expects to ship his horses from Dallas, Texas, to Cleveland, Ohio, about the middle of May and train there until the Detroit meeting. He will have Rilma, 2:091/2; The Private, 2:071/4; Baron D., 2:18, and several green trotters, including a very fast three-year-old by Ashland Wilkes, and some good colts by Gov. Strong, 2:10%.

Col. John D. Moore, Secretary of the purses will be for \$200, and a few \$150. The pacing classes will be 2:14, 2:20, 2:27, 3:00, three-year-old, two-year-old; the trotting classes will be 2:20, 2:27, 3:00, three-year-old, two-year-old, and entries will close

Trotters are no longer bred for speed alone. The modern idea of the utility of the distinctively American type of horse for a roadster, a trap horse and even as a hunter or saddler, has forced a change in the ideas of the breeders, so that symnetry and action are thought nearly as much of as speed. The show ring is an aim and a stimulus to the breeder, particularly the country gentleman, quite as nuch as to gain renown on the track.

Following are noted auction prices for At the Glenview dispersal sale in the fall of 1896 Pancoast, 2:21%, was bid off by Mr. John H. Shults for \$28,000; and at the Woodard sale at Lexington in February, 1899, Bell Boy, 2:19½, was knocked down to Mr. Judson H. Clark for himself and the late George H. Hopper for \$51,000. This last was the top auction price until in 1891, at Lexington, Anteeo 2:16%, was sold for \$55,000.

A much talked of horse in the West is A. J. D., a 7-year-old son of Anderson Wilkes. It is claimed that a mile in 2:12 was easy for him last fall. He has never started in but one race and that was of heats in which he finished 7-2-2-2 in 2:15%, 2:17%, 2:21%, 2:20%, 2:19%. He is entered in the M. & M. Kentucky's favorite for this event will probably be Country Jay, by Jay Hawker. The stories told of

\$6,000. On Thursday afternoon. April 17, twenty-four horses were being taken across the lake from the south branch of the Penobscot to Kineo, when uddenly the ice broke beneath them and

The trainer's success is not all owing to his skill as a reinsman by any means, for if his horse's head and stomach are not about right he will get left. Another very important item associated with racing is that at the finish of a heat, if a horse does not perspire freely, he must be taken back to his stall and sponged all over hot water, covered with blankets walked and made to sweat freely, so as to avoid congestion. If he bakes and the heat passes off through the lungs instead of being eliminated from the skin, he will surely stop and you will have a case of founder to nurse the next morning.

Colonel Atwood, chief quartermaster of the Department of the Lakes, has been the United States army. He has placed one order with a Chicago firm for 630 specially selected cavalry horses, and Colonel Wheeler has been assigned to the



Wilkes, 2:17; Nina De 2:241/2; Eliza Jane 2:22; Narcola, dam of Mazette 2:07%; Le-one, yearling record 2:28%; Suffrage, by Electioneer, dam Miss Russell; Elkin Girl :23; Kate Brooks, dam of Larabie, \$, :12%; Boniface, 2:29. Nellie A. and Le-ne, both with yearling records, are the nly two in the state that I know of. Have two yearlings by Adbell, both very handsome, and show great speed."—Horse Review.

It is a well known fact that the madlest horse will come to a standstill alost instantaneously if deprived of the se of the eyes, a fact made use of by owboys on the plains who will whip of coat and throw it over the head of a runaway. A Frenchman has made use of this knowledge and has turned it to good account in the construction of a sim-ple arrangement by means of which the norse's eyes may at will be covered, so as to shut out the light. It is called a blinder brake and consists of double blinders. The inside ones, which can be readily fastened on the ordinary blinder, are made of very pliable leather controlled by a cord, the end of which is accessible to the driver, and experiments show that the device is very effective.

From the Philadelphia "Item:" The highest class saddle and coach horses ever brought to Philadelphia are consigned by C. D. Crow of Paris, Mo. Among the saddlers are George Arnold, by Santa; Rose C., by Black Rose; Tobe Rich Hill, Mo., Fair Association, writes that the June meeting of that association Montrose. All of the above are thorough-will take place June 19, 20, 21. Most of the ly gaited and are good for runabout use. ly gaited and are good for runabout use. Special mention is made of the handsome black mare Jennie Rex, by Rex Denmark. She is the best acting horse ever seen and is a high school actor as well. She is a half sister to Rex McDonald, the champion saddle horse. There are also a numpion saddle horse. There are also a number of extra pairs that can go fast together. Some of the combination horses are prize winners. A handsome green pacer by Robert Rysdyk is also in this lot, and he is a perfect ladies' horse. All of the above horses are acclimated and ready for use. In addition to the above there are a number of speed and coach horses. John Hook of Mexica. We will be a support the presented by reversion of the offspring to older types. Every breeder understands this. Sheep growers witness the reappearance of sheep with black horses. John Hook of Mexico, Mo., who trained all of the saddle horses in the C. D. Crow consignment, at the Palace Exchange, seems to understand the saddle thoroughly and his way of handling them was a revelation to the boys in this Quafeatures. Skins, in the parents, that had spring with the most pronounced artistics, was a revelation to the boys in this Qua-features. Skins, in the parents, that had ker city of ours. The riding master was

to do more this year than any trotter ever did. It wouldn't surprise me to see this heredity is certainly of interest to all young horse beat The Abbot." Another Boralma devotee is Andy McDowell, who, cessful, should understand the potent Boraima devotes the prosperous trainer, like the prosperous farmer, keeps his premises neat and clean, with everything in its place. He is constantly learning something so horse that has never been beaten, don't has a part of feeding his animals, realising the prosperous trainer, like the prosperous farmer, keeps his premises neat and clean, with everything in its place. He is constantly learning something so as to perfect himself in his art. He pays attention to the horses' feet and makes a study of feeding his animals, realising Jay, by Jay Hawker. The stories
Jay Hawker. Th Give the chestnut horse another year and a special preparation, such as the other horse had last year, and he'll make a rec-ord as fast as anybody's trotter."

A Missouri reader writes: "The stallion Saywa, sire of the much touted Sagwa, 2:13%, is owned by J. W. Atterbury & Bro. of Madison, Mo. He is a good looking bay horse, standing 16 hands and weighing 1,250 pounds. As he is by Onward, out of an inbred Abdallah 15 mare, he should sire other foals as speedy as Sagwa."

The stallion owner, as well as the owner of the mare, is anxious to get the mare with foal to his horse, as it is unprofitable to stand a stallion for public service and fall in getting a majority of mares bred with foal, says Columbus. A rule observed by many stallion owners is to try mares the seventh day after service. From personal experience this is wrong, as is also the other rule to try on the fourteenth day. Mares may continue in ordered to purchase nearly 1,000 horses for use from six to eight days after receiving the attentions of the stallion. According to the "Breeders' Gazette," "the best and most successful stallion handlers in all most successful stallion handlers in all countries insist that a mare should not be returned to the horse oftener than evrecruited at Fort Leavenworth, Kan. The rest of the animals included in this order will in all probability be shipped to Cuba for the use of the troops on the Island. An order for 290 cavairy horses was recived at Port Leavenworth was an order for 290 cavairy horses was recived at Fort Leavenworth was an order for 290 cavairy horses was recived at Fort Leavenworth, Kan. The courages her to form bad habits and to ment, and at the end of the racing season his pocketbook doesn't look as if the grandstand had fallen on it and he can loss successful brother his car fare home. He treats the starter and the old Rockaway was a does not be received at Fort Leavenworth, Kan. The courages her to form bad habits and to ment, and at the end of the racing season his pocketbook doesn't look as if the grandstand had fallen on it and he can loss successful brother his car fare home. He treats the starter and the old Rockaway was a does not prove from the course of the animals included in this order we have prepared to the course of the animals included in this order we had a party carling for a stallon who loan his less successful brother his car fare home. He treats the starter and the old Rockaway was done of the racing season his pocketbook doesn't look as if the grandstand had fallen on it and he can loan his pocketbook doesn't look as if the grandstand had fallen on it and he can loan his pocketbook doesn't look as if the grandstand had fallen on it and he can loan his pocketbook doesn't look as if the grandstand had fallen on it and he can loan his pocketbook doesn't look as if the grandstand had fallen on it and he can loan his pocketbook doesn't look as if the grandstand had fallen on it and he can loan his pocketbook doesn't look as if the grandstand had fallen on it and he can loan his pocketbook doesn't look as if the grandstand had fallen on it and he can loan his pocketbook doesn't look as if the grandstand had fallen on it and he can loan his pocketbook doesn't look as if the grandstand had fallen on it and he can of inspecting the animals. Two hun- be returned to the horse oftener than ev-

while the samet guy who persists in following read to the horse at home, mating five heavy forth horse as also desired for size guns.

Abdell, 2:22, the champion yearling, is safely ticketed as one of the coming great price of the wonderful Electioner Tamity—one of those marks party ticketed as one of the coming great price of the wonderful Electioner Tamity—one of those marks party—the stake within present produced living foals, the odd one ally sites of the wonderful Electioner Tamity—one of those marks party—the stake within present produced living foals, the odd one ally sites of the wonderful Electioner Tamity—one of those marks party—the stake within present produced living foals, the odd one ally sites of the wonderful Electioner Tamity—one of those marks party—the stake within present produced living foals, the odd one ally sites of the wonderful Electioner Tamity—one of those marks party—the stake within present produced living foals, the odd one ally sites of the wonderful Electioner Tamity—one of those and and the different treatment, the owners all the conformation of very training season, the conformation of wards and the different treatment, the owners all the conformation of the law of have bought horses in Egypt at a high sensational 5-year-old Rovelland, owned at Palo Alto and now working at a 2-bg can be sufficient to the state of the presentation of the law of hard the stud for several seasons. His popularity there is evidenced by the foil to wonderful Elections who has him in charges. The popularity there is evidenced by the foil to wonderful Election to the study for several seasons. His popularity there is evidenced by the foil to wonderful Election to the presentation of the law of hard the study for several seasons. His popularity there is evidenced by the foil to wonderful Election, who has him in charges in the study of the study of



taking strong drink or appropriating property that does not belong to one. People usually betray their hereditary stincts. Theft in most instances is in-structive and indicates some latent force not always apparent. If you have a power or a weakness, that power or weakness

is the gift of nature.

Devoutness and a love for sports are transmissible traits. Each requires a pe-culiar mental conformation. Localities where the air is rife with either of these tendencies will in time produce a change in the inherited temperaments of the offspring. The plastic nature of the mate-rial out of which our bodies are constructed make possible such alterations. That the child imitates goes without question, but the power to imitate is the gift of nature. Instincts are the controlling agents which shape our existence. Lack of exercise of any faculty will in time lead to its extinction. Hence the advanthe reappearance of sheep with black wool. This is the atavic form of an an-cient progenitor. We see the same in the human family. People with a trace of

left behind.

John Splan takes the Boralma side of Offspring the blackest of the black. Here The Abbot-Boralma argument. Here is was an hereditary force slumbering and what he says: "Boralma was born great, had apparently been wiped out, but not There has never been a time since he was so; it only required a favorable opportuntwo years old that he couldn't trot a part ity to show itself. We apologize to our two years old that he couldn't trot a part ity to show itself. We apologize to our of a mile at a 2:00 gait. He has trained readers for the technical treatment of this on from one class to another and never subject in a horse paper. We have avoidmet a horse that could make him race.

Everything he has been asked to do he has done, and I believe he has a chance sion of the subject in the light of the lat-

> with grain. He knows that it is the quan-tity that is easily digested that keeps him well and furnishes muscle, etc. He has also learned by bitter experience that his horse will train off from frequent attacks of indigestion, that if he is being burnt up with grain he won't cool out properly, and that at the finish of a heat he must walk back to the stall and see that his horse is cooled out properly. If it is a very hot day it is essential to apply sev-eral spongefuls of cold water to the animal' head. That helps to cool him out and if he is more than ordinarily exhausted a few drops of tincture nux vomica in a pint of good sherry wine will reviv him. It is all nonsense to immerse hi body with hot liniments between heats so that in midsummer his skin will look as if a fire had swept over it. The careful trainer looks after his horse's feet and legs carefuly, as they are the propelling power; sees that the bit is kept clean and that it suits the horse. He has loaned the soaking tub to his neighbor as he prefers the wet woolen swabs or his horse's feet at night, and he does not allow the blacksmith to whittle his ani-

trot. The runner gets the last impulse for the air flight from one foreleg, the first contact with the ground, after the air flight, is on one hind foot, whereas in trotter or pacer there are two air flights in a stride, the fore and the hind foot leaving the ground and striking it so nearly at the same time that it is difficult to separate them, though in all probability the hind leg exerts the greater force. There is no difference in the action of the trotter or pacer in the fitness for light arness work, the gallop is nothing like as favorable. The gallop may be described as a series of unequal pulsations thus, one, two, three, four—five. One representing the first hind foot to strike the ground, two the stroke of the second hind four the last forefoot, then the dash and five the air flight. One two, one two, one two, one two is the rhythm of a square you may educate until he dies of old age; trotter or pacer, the two air flights being so brief that the motion is steady." DR. B. J. KENDALL CO., ENGSBURG FALLS, Vt.

L. E. CLEMENT'S HORSE GOSSIP.

Editor RURAL WORLD: The editor of

the "Western Horseman" and Grattan are in an argument as to the scope of the the "Western are in an argument as to the search are in a search are in an argument as to the search are in a search are in an argument as to the search are in a search a sounded so strange to his Hoosier ears long on memory, some sounded so strange to his Hoosier ears long on memory, some sounded so strange to his Hoosier ears long on memory, some or was it the hereditary inheritance from the children of grand old Missouri. As a line of developed saddle horse ancestry?

I have seen back in the hills of Vermoni in the hill in the h necessity adopt this expression, which tion and memory. These can be transmitted. Everything else he must learn. Teach him the way he should go and he will go that way." I have seen a good many pointless jokes from Grattan, but this one easily distances all comparisons. Undoubtedly the late Robert Bonner was one of the closest students of conformation we have ever had. It is claimed that he, when asked by the late Campbell Brown to pick out a trotter from a number of horses, selected the pacer Duplex. Duplex is not even a trotting bred pacer, but in all his blood lines is untraced. Possibly like other Tennessee pacers he has a strong infusion of running blood. His sire bred to the best daughter of Tom Hal, the produce was Billy A., that trotted in 2:131/4. One of her daughters bred to the untraced pacer Hoosier Tom gave us Bald Eagle 2:24%, pacing. Mr. Bonner realized that there was a similarity of conformation in horses bred from running and pacing stock, and they have been developed to trot, and are more likely to do that than horses of different conforma-

Blue Bull was bred in the last ten years of his life to all kinds of mares. More of his 2:30 trotters are out of mares by Pete Guffin than from any one sire, and the owner told me he was an ordinary farm daughters he got such mares as Lona Guffin 2:231/2, now in the great brood mare list. It is more than likely Blue Bull had much of the old pacing conformation, yet out of pacing mares and mares of no breeding he got consistent trotters. I know of only two mares by thoroughbred horses that were bred to him. These were the dams of the gray horse Shrader and Stewart Mack 2:27. Neither is a sire Shrader is the sire of two or three dams and Stewart Mack's inheritance from his running bred dam has kept him from be-

coming a sire. Stewart Mack is considered the handsomest son of Blue Bull. I have never heard of one that required the same amount of hard work to get him into the standard list. It is more than possible that he would be oftenest picked as sire. Brussells I am told is most like his sire. Blue Vein was almost a model for conformation, and I remember no more perfectly proportioned son of Blue Bull horse owned by and called Hunt's Blue Bull, nor do I remember more perfectly formed horse of any breed.

Kindergarten is given in all the 2:30 lists as the sire of the black gelding North Star 2:24%. Kindergarten was the poorest individual son of Blue Bull I ever saw. He was and probably is owned by Rich Wilson, owner of Arrowwood by Nutwood, and he will more than likely know if the horse is honestly entitled to a record. I don't care how well formed he is nor how near his conformation may be to the Vermont Morgan, yet I have never seen any other horse that would step right along 12 to 15 miles an hour as

we had a party caring for a stallion who for the use of the troops on the Island. An order for 290 cavalry horses was received at headquarters in the Pullman building, Chicago, Wednesday. Twenty-five heavy draft horses are also desired for siege guns.

Abdeil, 2:22, the champion yearling, is safely ticketed as one of the coming great sires of the wonderful Electioneer family.

His first representative appeared on the light of the wonderful Electioneer family.

The Rible speaks of the horse at allon who had a party caring for a stallion who had ever trotted in 2:30, and he was out of the fare home. He treats the starter and the plant of fare home. He treats the starter and the plant of the colls mark of the colls Rockaway mare dam of Dick Smith 2:17. Thousands of the colts that were sired by thoroughbred sires have been while the smart guy who persists in following along in the old lines is less fortunate and is away back in the rear fighting the distance flag.

"In the beginning of every training season builting for a stallion who had respect and thereby gets all the favors he is entitled to, while the smart guy who persists in following along in the old lines is less fortunate and is away back in the rear fighting the distance flag.

"In the beginning of every training season band of the colts that were sired by thoroughbred sires have been while the swart gust and twenty-intended to sired by thoroughbred sires have been while the swart gust and twenty-intended to sired by thoroughbred sires have been while the swart gust and twenty-intended to sired by thoroughbred sires have been handled for speed and yet Exchequer SSI is the only one that ever trotted in 2:30, and he was

THIS BUGGY DIRECT las good Wheels, Azles, Springs, etc. Guaranteed OHE YEAR. Seet work, levest by grice.

Ger work, levest by grice.

GHAS. O. CILARK & CO., 22 S. 1st Sk., St. Lonis.

PRAIRIE VIEW STOCK FARM, Will keep for service the following stock:

WALNUT BOY 2:111, Brother of { Bellie Andrews 2:06% Victorine 2:20.

ALLISON BOY, by Walnut Boy 2:11½; 1st dam by Andrew Allison an inbred Clay mare. I consider Allison, 2:10½ and others, 2d dam son of Walnut Boy 2:11½.

SUNSET SENIOR, Standard and registered, saddler, goes the gates and cannot be beaten for style.

All of these horses are standard bred. I also have six Jacks, all black, from 15 to 16 hands high. Stock for sale. For full particulars and pedigree, apply to J. G. CALLISON & SONS, Windser er Leeten, Me.

make a silk purse out of a sow's ear," nor C. W. McCLAIN do figs grow on thistles, nor waterm on pumpkin vines.

If the colt has inherited from his an

therefore "you are up against it."

When I came to Missouri 20 years ago
I went to Mt. Vernon to see some of the

colts by Merchant 599, son of Belmont

most of them out of very ordinary mares yet the best we had, and every little ras

with his great Columbian sweepstakes winner Artist Montrose. Was this colt

muster day a year ahead, because they had inherited from Hale's Green Moun-tain the style and saddle horse quality

Gist's Black Hawk, by Blood's Black Hawk, famous, he being one of the few

horses that won in open competition over

given as by Tom Hal, 2d dam by Copper Bottom. Such colts would be susceptible

of harness education or make saddle

of harness education or make saddle show horses.

Grattan must have inherited a strong tendency to make the worse appear the better side. Nor should he think because in years of living in Missouri among Kentuckians he has not adopted the customary "You all," or that all colts of proper measurements from hip to hock and from shoulder to ham, with suitable ribbing, long beneath and short from withers to coupling, can be educated to harness speed. If it were so there have been too many sleepless nights spent over the breeding problem.

TUMORS ON THE SHOULDER.

KENDALL'S SPAVIN CURE.

One Bottle Saved \$100.

Headingly, Manitoba, Feb. 5, 1900.
Dr. B. J. Kendall Co.:
Dear Sirs: I had a horse last summer that got prodded with a fork on the inside of hind leg at knee joint; he kept getting worse, so I tried a bottle of Kendall's Spavin Cure on it. Now he is just as well as he was before he got hurt.
That bottle saved me \$100.
Yours truly,
J. E. JAMIESON.

W. F. Young, P. D. F., Springfield, Mass Dear Sir: Please send me by American Express three bottles of Absorbine. have used a bottle of it and find it to be all you claim for it. Send as soon as pos-sible. Yours truly, FRED J. TUFFS.

H. H. Hamer, Vermont, Ill.
Dear Sir: Send me more of your Fistula medicine. I have had good success
with it. Yours truly,
GILBERT B. JOHNSON.
Youngstown, Ill.

Mention The Rural World when you write.

Guaranteed

CURE. Use et al. e

1901.

Menominee, Mich.

FRED J. TUFTS.

The first dam of Cabell's Lexington

that made Cabell's Lexington.

Washington Denmark

Buggy Announcement Extraordinary.

mers at wholesale prices and allow you to te titch up to it, try the springs, running qualifi-istyle before you decide to keep it. No more mseen." They know the quality of their go all on their merits. Write for free catalogue.

the bag, signs unaverselling to let them sell on their merits. Write for Iree cananges age to let them sell on their merits. Write for Iree cananges age to let them sell on their merits. Write for Iree cananges age to let them. We have a sell of the sell of



M'CLAIN & BIGGS

HORSES AND MULES.

Will sell 1,500 Horses and Mules on May 20-21-22,

1901, at Public Auction and Private Sale. Special Attention Given to Filling Orders at all times.

BURNS, OREGON.

ALMONT MEDIUM \$1.33, record 2:18;4; sire 11 in 2:30 list. They are Prince Almont 2:18;4, Warwick Medium 2:12;4, Lymont 2:38;4, Evs 5., 2:18;4, Kamiae 2:19;4, Almanta 2:20, Almanta 2:21;4, Warwick Medium 2:12;4, Lymont 2:38;4, Almead 2:24;4, Rhantae 2:29;4, Almanta 2:20, Almanta 2:20;4, Rhantae 2:20;4, Almanta 2:20;4,

nsh; same terms as above.
ix Jacks for cale, 8 to 6 years old and 14% to 16 hands high. Call on or address

J. P. HAMMETT, Yates, Mo:

Henry Wilkes, sired by Ashiand Wilkes, 2:17% (sire of John R. Gentry, 2:00% and other Hambletonian, Jr.; 8d dam Bonnie C., by Joe Elmo; 2d dam Nettie by Blackwell' Hambletonian, Jr.; 8d dam Mollie by Bay Eagle, thoroughbred son of the great Grey Eagle These Stallions are not only royally bred but bred right. MONGOLD stands is hands high, good flat bone, weighs 1200 lbs., and has shown his ability to trot in 2:15; has a record of 2:344. Will be manked this year.

HENET WILKES is a noted show animal, possesing more style and beauty than any-body's horse. Awarded ist premium in Roadster and all purposes, wherever shown; two 400 silver medals Kansas City Inter State Fair. Will make the season at my place.

For extended pedigrees and terms, address

ROLLA C. BROWNLEE, Holden, Mo.





COLUMBIA, MO., RACES,

JULY 30, 31, AUGUST 1, 2.

STAKES

MISSOURI STATE FAIR.

At Sedalia Sept. 9 to 14.

STAKES:

Stake No. 1—2:45 Class Trot. Stake No. 2—3:30 Class Trot. Stake No. 3—2:27 Class Trot. Stake No. 4—2:23 Class Trot. .. \$ 500 | Stake No. 6-2:35 Class Pace take No. 7-2:25 Class Pace. take No. 8-3:17 Class Pace. stake No. 9-2:10 Class Pace stake No. 10-(3-year-old or un

Entries Close June 15th, 1901.

dle and draft geldings and mares, broken and unbroken; also mules of all ages and sizes. Messrs. McClain & Bigga pay special attention to filling orders at all times, and times are the second of the

J. R. RIPPEY, Secretary,

Missouri State Fair, Sedalia, Mo.

Short Shipment Racing Circuit of S.-W. Mo.

Dates—Holden, Mo., August 6-9; Harrisonville, Mo., August 13-16; Rich Hill, Mo., August 20-23; Nevada, Mo., August 27-30; Higginsville, Mo., September 3-6.

Stake Race Program 1901:

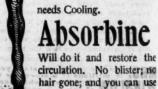
Stake No. 1-9:45 Class Trot 8 400	Stake No. 6-2:35 C'ass Pace \$ 40	
	Stake No. 7-2:25 Class Pace 500	
Stake No. 3-2:23 Class Trot 1000	Stake No. 8-2:17 Class Pace 500	
Stake No. 4-3:18 Class Trot 500	Stake No. 9-2:11 Class Pace	
Stake No. 5-3-year-old Trot 200	Stake No. 10-3:00 (3-year-old or under pace) 300	
Stake No. 12-3-year-old Trot 300	Stake No. 11-2-year-old Pace 900	
***************************************	·····	

Stakes to close June 15, 1901. Write to John D. Moore, Circuit Secretary, Rich Hill, Missouri, for program giving conditions and rules governing entries.

ALLIGON 31236

Sire of Gyp Walnut 2:08¼; Walnut B. 2:12¼; Robble C. 2:14¼; Dan T. 2:16¼; Monnut 2:17¼; Joseph R. 3 yr. 2:22¼; Dr. Port 2:30. ONWARD BOY, by Onward Fewel, record 2:11½; 1st dam by Walnut Boy 2:11½. This horse is a black, 16 hands high and one of the best gaited trotters in Missouri. W. B. WILSON, Lexington, Mo.

> FISTULA POLL EVIL and all Hiemishes on horses cured with HAMER'S SURE CURE or money refunded. Hemman Cure or horses. Send for 44-page pamphlet. \$1.00 per bottle by mail. Sold by Druggists everywhere Cures Founder and Distempor. H. M. HAMER. VERMONT, ILL.



An Inflamed Tendon

the horse. \$2.00 per bottle. Regular dealers, or W. F. YOUNG, P. D. F.

Home Circle.

LINES TO A FRIEND.

Lift up, O, Soul, thy drooping wing; And raise once more thy troubled face With free and joyous measure sing, In life's great chorus take thy place.

No other song the space can thrill, Which to the Master thou dost owe, Breathe constant songs of praise, until Thy heart with bliss shall overflow.

Sing on, O, Soul, though storms arise, And madly beats the hall and rain; Each worthy life, a sacrifice; Stands strong amid the gusts of pain. MAY MYRTLE.

Written for the RURAL WORLD.

It is considered drudgery by most peo-ple, even their owners, to take care of animals, often delaying or neglecting it altogether, almost any excuse being accepted by themselves for doing so. Con-science or pecuniary motives make many faithful: but how small a proportion appreciate the opportunity they have to be-come familiar with both the physical and mental characteristics of sub-human animais? It is unaccountable that in all the ages during which man and beast existed together in the most intimate relations, so little effort has been made to become acquainted with the brute creation. We have taken it for ted that the "lower animals," as we granted that the work and call them, were made especially for our use or abuse; blind to their wonderful capabilities which establish an undeniable right to be considered "fellow creatures,"

A lady in Paris left by will 30,000 francs to the one who should first establish com-munication with the inhabitants of the planet Mars, though our own earth offers a class of beings well worth investigating, and trying to discover some means of in-terchanging thoughts. Fortunately for all some of the most learned scien tists are now entering on this unex-plored field and books on animals are multiplying rapidly. By intelligent rethese naturalists have demon trated that the animal world very closely resembles man, and that what we call "instinct" in the former for the purpose of making a distinction between their innce and ours, is also prominent in man, while most of the attributes of the human mind are distinctly developed in beasts. The various ways in which the otion of love manifests itself in mar ed in animals by their selfsacrifice, filial and conjugal devotion sympathy, forgiveness of unkindness injury—they have memory, inventiveness, industry, fidelity to trust, duty or friendship; cleanliness, government by leaders, ssion to authority, presistency of purpose, love of liberty, beside many othinces which cannot here be

In addition animals possess a faculty ich is considered a sixth sense, as it is conspicuously absent in man. I refer to the power of taking the most direct route to their homes, though they may never have traveled it before. There are well authenticated instances where dogs in particular have gone thousands of es to reach their homes, the return trip even including a passage across the n. A mastiff sold from Chicago to go sence, having shown a courage, persist ence and affection scarcely ever equaled

in man.

Animals are also extremely sensitive to terrestrial phenomena-for days before the destructive earthquake in Charleston animals were noticed increasing as the crisis approached, though human beings were entirely unus of the coming catastrophe. The an" (Davis) says that 'sperm whales have a means of comm with each other at distances of six miles. Every whaleman has observed the fact, and it is noticed that the telegraph is as perfect as ever in high winds when a thousand waves are breaking." Here the wireless telegraphy

Animals are often acute judges of character; there are many instances on rec-ord where they have prevented and exposed crime. I know a man who says he 'never makes a deal of importance without taking his dogs or his children along.'
They are also capable of self-education as well as of being taught by other ani mals and man, while their readiness to in art. Like the men folks that wer understand and willingness to execute the raised on pie and doughnum, we have sometimes a hankering after things of consider that we can explain nothing by other days. It may not be wise, but who

sidered mere drudgery if those who did it dairying, and poultry raising, there is only realized that it might be made a not much time for leisure. As for the perpetual pleasure. A farm laborer does "mowing," there are four strong men not need a college education to be learned, for he has the whole book of nature opened before him, and he may are on the farm from choice, and love read secrets hidden since the dawn of all nature, and believe it is the better creation, if he only will. All that is necessary is to train one's self to habits of observe enough of hard work to be able to servation, and mark the peculiarities, not only of different species, but of individ- it than they have strength for. Especies get acquainted with them, and prove self a friend by unvarying kindness. No human being will show his best traits are misfits in this world, round pegs in to one who treats him with indifference or cruelty, neither will animals.

To keep children on the farm make their lives interesting by spending a few dollars for such books as "Mind in the Lower Animals," by Lindsey; "The Beau-ties of Natura." by Mr. John Turken ties of Nature," by Sir John Lubbock with the innumerable animal stories now so popular, and which read so much like romances that the young people will pre-fer them to the yellow-covered literature so pernicious to both mind and heart.

We were not farmers before coming to and had all to learn ab many things, particularly stock. I have spent many hours leaning on the farmyard fence watching the animals, to be-come thoroughly familiar with their mons and general appearan in health, and in this way could tell if an animal was sick the mo

IRS. Has been used for over sixty years by millions of methers for the WINSLOW'S children while teethers to the work of the wo

octor them as we did ourselves, a few mes calling the family physician, but ave been so fortunate as to have very few die from any cause during more than 20 years of farming. A friend in one of the very finest dairy regions in New York, who has 130 cows, tells me that himself and neighbors are very successful when using Homeopathic remedies, particularly in milk fever, the most dreaded disease nong their herds.

We are especially favored by having the

equaintance of a young stock breeder, those occupation gives him as much leasure as profit, for himself and his anmais are mutual friends, his kindness and care having brought out the finest traits in the characters of both parties. Some choice calves receive his particular attention-one, wishing to enjoy all his notice, pushes the rest away, ever earing up and putting her feet on his houlders when he turns to another. He would not exchange his employment with its daily increasing pleasures for the mo notony and confinement in a city busi-ness life, or consider its amusements an ness life, or consider its amusements are equivalent for the enjoyments he has a ome. "I am sure I love my stock," he said with shining eyes, "for I do not want to sell it no matter at what price." It is a bright evening when he drops in with some new cattle book, or interesting article for us to read in the many publica tions he takes, including his favorite COLMAN'S RURAL WORLD. Sometimes he brings over in his arms a beautiful Angora kid and offers it as a poodle, and again invites us to his place to see a fresh arrival of registered Shorthorns.

"And this our life exempt from public haunt,

Finds tongues in trees, books in the run-ning brooks; Sermons in stones, and good in everything." SARA THORP THOMAS. Pulaski Co., Ark.

Written for the RURAL WORLD.

GOING AND COMING FROM SCHOOL It is another care for the mother when the children start to school. Country schools are usually a long distance from Scholars of all ages, from the wee tot of six to the nearly grown boy or girl of 16 to 18, meet going to and fro Very often the language and conduct are not what they ought to be. Little ones listen with wide open eyes and open ears to things that parent or teacher would be shocked to think they had heard. The youngsters are threatened with the dire punishment of not being let walk with their elders if they repeat this at home Mothers should know who the childre come and go with, and the conduct on th way. Thus they can root out the first evil seed from the young mind, which, if left to germinate, would bear bitter fruit. Protect our children as we will, the knowledge of evil will creep in some where, somehow. The mother has to ex-plain the danger as well as the sin that is in badness; to point out the sunken rocks and warn the children of the danger.

Some say this is the teacher's task; in part, perhaps, but the teachers of country schools have no sinecure; they have teach primary pupils, grammar and up to the high grade. If this is done well and faithfully there is little time for other things.

One vicious pupil can do undreamed injury to a whole school. Boys and girls begin to crave for a more exciting life. They have heard of the pleasures and fascination of city life, theaters, parks, boat excursions, etc. Farm life is to narrow and cramped; they will go to the city, make money and see life. They note how many of their schoolmates have already gone. The parents argue and plead in turn. It's no use. The boy and girl really have an honest, warm love for father and mother, but have come to think of them as old-fashioned and away behind in knowing things; things the learned from older companions on their way to school. So they go. If a mother has warned in time of the dangers and temptations that throng the way, all may go well, but if the quicksands and false beacons have not been pointed out, then God pity them, for many will sink into the depths where no human aid can reach them; "and God himself seems scarce to

Jefferson Co., Mo. Written for the RURAL WORLD.

Time presses these beautiful spring days, but we will take time to say we were one of those who, at times, longed for some of the beautiful things and doughnuts, we have sympathize with those who have more of ly are we sorry for those who are on the square holes, if you will, but the thing to do is not to wabble around with each wind that blows, but rather to build on the corners and make as good a fit as possible. It is possible for us "to be bigger than our surroundings," but the strength to be so does not come all a once; must be gained little by little What we all need issympathy and charity, for we can be "a law unto ourselves, but not unto others."

The only time I find to read is whe baby gets her dinner, but in that time we have been able from time to time to gather many helpful items from the RU-RAL WORLD in all the different departments. We have all kinds of stock and are so interested in learning how to care for them and the poultry. What an excellent article Mrs. Mary

Anderson gave us on management. I ting my wits, such as they are, to work

homes, their children and their surround-ings. But I just couldn't endure the thought that you should picture "C. L. H." a faded woman with "folded hands' veeping over past privileges. C. L.H.

Cherokee Co., Kas.
Laudable ambitions are worthy, and no truly progressive spirit is wholly satis-Wholesome discontent is the root of progress. It is foolish murmuring that makes one unhappy. The broad charity of "C. L. H." united with healthy desires for better things is what will give the ideal farm home-the one that will all home life-city and country alike. Speak your sentiments again, "C. L. H.," they'll do us good.—Editor.

MOTHER IS THE ONLY ONE. Ah, mother's gettin' old and gray: Some day, why, she'll be laid away. Down in th' field by th' old mill stream And when thet happens, like es not, The old farm'll jest 'bout go to pot: We'd lose all hope, ef ma was go Fer she most runs the farm alone. Callin' the chickens to their corn; She cooks a meal I wouldn't trade Fer the finest farm house ever made An' shoos the pigs back to their pen; She feeds the cow, an' then she goes Inter th' house, an' sews, an' sews. An' bakes a cake, an' runs th' churn, An' gathers in th' wood t' burn; An' ef you say, "Ma, rest awhile!" She'll answer with her old sweet smile "Child, I ain't tired a bit.' Are you? We can't rest when there's work to do. An', supper o'er, the chores all done,

Then she alone, kneels down to pray Yes, after all is said and done, Your mother is the only one.

—Robert Mackay in Success Written for the RURAL WORLD.

An' when th' family's tucked away,

She hears our lessons, one by one,

An' then she sees th' cat is fed, An' puts the children all t' bed.

SOME OTHER STORMS "Nancy's" letter in a recent issue has rought very forcibly to mind three other which "we" have enjoyed: although one of them is of such that we have not yet recovered from the shock. Indeed, we do not think one ever quite recovers the old feeling of security entertained before a cyclone close one's eyes and almos see the awful wreck which inevitably fol-

Our cold spells and sharp, biting "north ers" come to a point very abruptly, and are soon forgotten in the warmth of the bright golden sunshine which arrives with the next change of temperature. But the cyclone is never forgotten. Ours arrived very suddenly just as nearly everyone was sitting down to dinner. The crash and roar came and passed before one had time to begin to be frightened, and in a minute it was all over with. Many homes with all their contents were scattered to the four winds of heaven, into shapeless, unrecognize fit only for kindling. In ooking over the wrecked section the day following the calamity one could scarcely believe that all the destruction ne in less than five minutes, or that the strange freaks of the storm were

the warpath.' use was literally cleaned out indide-partitions, floors, ceilings and windows; and the empty shell was turned bottom side up in another yard three blocks away. The two-story High School building had a large hole blown through the second story big enough to admit an ordinary freight car. This went through three solid brick walls, leaving the first mparatively uninjured. This building was well insured and will soon be rebuilt. The school itself is continued in three of

ouse had one corner torn away about six feet each way, taking it off clean, as though cut with a sharp knife. In the same yard, deposited with appar-ept carefulness, was a board ceiling about if feet square. This was in good condition, although bottom-side up. It has not yet been recognized. A large porch was wrenched away from one house and the the crash or know of the disaster to their eighbors until half an hour later. The tirely over for a space, then coming down to earth with all the fury of its murder Three little lives were sud-

ferers, and purses as well as homes were generously opened for their relief. Surtwo hours for the first few days and the rounding towns contributed liberally, and water changed in the cups often, any one it is said enough has been given to fully

saw it. We concluded from the first to feel that we can afferd it. We are doctor them as we did ourselves, a few blessed in the possession of our little furious thunderstorm arose in the foreblessed in the possession of our little broken the foreones, and in increasing strength to meet the battles day by day. I trust that all half was banked up against the house, which soon changed to hall. The half was banked up against the house, which soon changed to hall. The two current of the control of the present of the second reliable that I have so enjoyed the writings of those who told us of their youngsters, and we took every available halfs of the property of the possession of the property of the property of the possession of the property of the possession of the property basket and pail and filled a hundred-bar- all over the brooder floor. This is fields. There was no fruit left that year,

> that services were suspended. Several ladies fainted, and as soon as the storm cleared away the youngsters pulled off shoes and stockings and waded home in the mud, while older people had to East they grow fowls and eggs to sail to wait for the family carry-all to be sent for. My mother had remained at home alone, and remembering the large brass kettle left by the side of the creek where the family washing was done, she started was already floating, and in another minwas aready hosting, and in another initiative would have been off on a voyage to Kenka Lake. Mother rushed into the water, and at the risk of being drowned, saved the old brass kettle. As I went barefooted into the east door, carrying shoes and stockings in my hand, I exected a scolding; but was confronted by nother-wringing wet-coming in from the creek and carrying the kettle. st took my breath away, for I did not imagine what had happened to All she said was: "Oh, dear; go upstairs as quick as you can and get me some

MRS. HELEN M. WARNER. Wills Point, Texas.

IN MEMORIAM

Died .- April 16, Harriet F. Lyon, moth of your correspondent. She was the laughter of Conrad and Lydia (Reed) Dillman, was born March 12, 1833, and married to George Lyon, who died October 10, 1897, on May 25, 1858. Six children were orn to this couple, and all live to mourn for their parents. She was a woman strong mind and untiring energy, alway ready in sickness and distress to do wha she could to assist suffering humanity She united with the Christian Unitaria sermon was preached by Rev. C. F. Er gart, at her late residence, and her mortal emains laid to rest in the family grave yard on April 17, 1901. C. D. LYON.

Poultry Yard.

INCUBATOR EXPERIENCES

Editor RURAL WORLD: I will try to give the experience of myself and wife with the incubator, and also ask those who give their experience to state the length of time eggs are cooled and how turned, as I read in one letter that the turning and cooling are the most importow often to do either of these

About one year ago I got the chicken fever and bought a 264-egg size Successful machine. We ran it according to direcsimply the result of physical forces "on tions sent with it and hatched five chicks. regulator when it was worse than non It was claimed this machine did not need at all, for I depended upon it. In one any moisture, but our own experience is my incubators recently I noted the ten to the contrary. These five chicks were perature at regular intervals for about nice, strong ones, and we raised them.

One of them is a big 9-pound hen that is laying at present. Our second hatch proved to be a little better. We got 28 chicks. From the third hatch we got 69 chicks and raised 63 of these, and the fourth hatch turned out 26 poor, weak chicks and all died. This is all we ran it lear seems of the fourth hatch turned out 26 poor, weak chicks and all died. This is all we ran it last season.

was 33 chicks that died before a week. My tion. The developing chick must breathe, wife went to town, and having no one to wife went to town, and having no one to watch the machine, the room got too warm and ran the temperature up to 108

aged and said. "If it does no better next time than it has in the past, I will never set it again." About this time Mr. Greer sent you a letter saying he had just had a amily who were at dinner did not hear poor hatch on account of his machine getting too hot, and thanks to him, he did not forget to say how hot it got, and also said that 106 degrees would kill almost any flend seemed to dance along—jumping en-tirely over for a space, then coming down to earth with all the fury of its murder-103 degrees the first week, 104 degrees the second week and 106 or 106 degrees the denly ended; several badly injured and third week, and use no moisture at all. bruised, one dying the next day. No one else fatally hurt.

Every citizen who was able to do so, came nobly to the assistance of the suf-

replace the losses of renters. The most of them. They must have replace the losses of renters. The most of those who owned the wrecked buildings are abundantly able to stand the loss and will rebuild soon. The total loss is estimated to reach \$100,000. There seems to be no section of coun- begin with, if not, kill them, for they will

only die in a short time anyway.

Wifey and I have come to the conclusion that if the machine is filled with eggs with a cyclone thrown in for good the measure. If we knew of a locality where there were none, past, present or in the future, we would move to that place immediately. The feeling of security we would enjoy would abundantly compensate for minor inconveniences. One could stand amost any kind of a storm if read stand amost any kind of a storm if read were an amost any kind of a storm if read well as the future, we would enjoy would abundantly compensate for minor inconveniences. One could stand amost any kind of a storm if read well as the first week, 102½ degrees the second well as the whole question in her last letter, so we don't know where to go until some other precinct is heard from. Meanwhile, we are willing to try Old Missouri once more. Having weathered the gales of 35 twinters and endured the temperature of as many "roasting hot summers" in that state, we are prepared to believe Missouri fully as pleasant one year with another as any of the five other states where we alternately froze and melted. Speak in the shade with better grace than we can endure from five to 30 degrees below well and in the shade with better grace than we can endure from five to 30 degrees below. We tested twice, the first time on the eighth day, the second time on fitteenth on the banks of that stream, reminds me

we tested twice, the first time on the eighth day, the second time on fifteenth on the banks of that stream, reminds me day. As to size of air cell in eggs I would

thought it was fur; but there was no fun looking at the orchards and wheat trying to raise chicks artificially, so will close, thanking Mr. Greer and the RURAL nor much of anything else. The hall made a clean sweep of every growing thing.

Another storm nearly 47 years ago, came incubator. I think any good standard on Sunday as the closing performance of make of incubator will hatch if properly a protracted drouth. We were at church run, and none of them will hatch if no and the thunder and lightning were so run correctly. J. M. P. AND WIFE, run correctly. J. M. P. AND WIFE, The R. R. Farmer. Chillicothe, Mo.

East they grow fowls and eggs to sell to eat. They also grow fowls to show in poultry exhibitions, and incidentally at prices ranging anywhere from \$5 to \$100 each. These pursuits are not the same on the run to save it. None too soon, as it and cannot be, and the sooner the rank and file of fowl raisers learn it the better it will be for all concerned. For it is ar injury to the agricultural interests of the country to have thousands of people attempting to breed fowls to feather, cold and form and have them disseminated throughout the country as the meat and egg producers par excellence. The man

who is striving to get the greatest nun ber of eggs from his pullets to sell in De-cember and January, and the other win-ter months, as well as during the whole year, selects for his breeders those having the best record as layers, even if it should be a Silver Wyandotte with a single com or feathers on her shanks. He mates them with a male from a female with great egg record, even if the dam had white in earlobe and he himself is defect. ive in spike of comb or is brassy on back or hackle. I am right. Any close observe er will tell you I am right. If you neve learned the art of observing closely keeping correct records, perhaps you

INCURATOR EXPERIENCES.

Editor RURAL WORLD: Seeing an in itation in your issue of April 3 for the discussion of incubators, and having oprated three of the five advertised th uring the past winter, I will give some of my experiences. Allow me to say, in consideration o

seighbor McConn, that they were hot-vater machines. I have never used a hotair incubator. Although they will hatch, yet I prefer the hot-water system. Should the lamp go out the water will hold the heat, while with air the eggs begin to cool quite as soon as the source of heat is removed. My recent experience convinc me of the advantage of hot water in this respect. Houses for human habitation used to be heated with hot air, then steam, now hot water. There is something about a warm and humid atmosphere more conducive to animal life than warm dry air.

AS TO THE REGULATOR, my experi

turning and cooling are the most import-ant part. The writer did not say a word that the wafer is not satisfactory. about how to turn, or how long to cool, or left to itself it will vary from four forty degrees, according to its age and the outside temperature. One can use it and hatch eggs by more or less constantly incubator. I chose the hot air style, as it watching the thermometer. In fact, two has no tubes to leak. Well, it came, and we set it up (anybody can do this that can use a screwdriver). Then we set the whatever, and sometimes get good results I have had experience with the wafer

This season we set it and the first hatch ance, next to temperature, for degrees in the egg chamber, which was the cause of this poor hatch.

Well, my dear little wife was discourmany "dead chicks in the shell." Often more, of fully developed chicks die. That is my experience. Now, why? It is not the heat. Of that I am satisfied. I tend to the belief that the pois gles, or asphyxates those that would hatch later. Can anyone offer a better explana from thence on, not even barring the physical effort of freeing itself from the encircling shell. If the chick is alive and

vigorous on the eighteenth day, and does

not hatch, might it not be that the ma

chine killed it? Has any one got an in

which there never or rarely occurs dead chicks in the shell? If so, kindly outline the system of ventilation. TURNING THE EGGS.-Regarding th three styles and also turned by hand While manufacturers often dwell on the eauties of their cunning devices, I am aclined to doubt the effectiveness of any of them. If one uses them and does not cool his eggs feeble chicks are apt to re-sult. I deem nature's method the best Think of some robin or jaybird proclaiming to his mate and fellows of some in genious egg-turning arrangement. Turn-ing by hand is too slow for me. I consider the extra-tray the best practical method. Though there are objections to this, yet the whirl through the air gives the em scive to health and vigor. With such l have had my best success. THE LAMP.—The lamp must needs b

HOG, HORSE, CATTLE, DOG, Sheep, fire and water and snow drift proof. AMERICAN FIELD AND HOG FENGE If you cannot find our local agent write to American Steel & Wire Co., Chicago or New York.

HE principal requirements of a good BEYMED-BAUMAN paint are: covering capacity, durability, appearance and economy. Pure White Lead and Pure Linseed Oil is the only paint that fulfils these requirements.

PARKERY

ATLANTI

BROOKLY

WLOTER

BOUTHERS

SKIPMAN

COLLIER

RED SEAL

MORLEY

EESTOGEY

FORM T. LEWIS & BROS CO Philadelphia.

Salem, Mass

A building painted with Pure White Lead will look better and last longer than if painted with any other material, and the first cost is less; and as its covering capacity and durability are much greater. it is by far the most economical.

For any color or shade required, use NATIONAL LEAD COM-PANY'S Pure White Lead Tinting Colors. Pamphlet sent free

National Lead Co., 100 William Street, New York.

POULTRY.

BLACK LANGSHANS exclusively. Eggs for hatching. No stock for sale.

JACOB HETRICK, Wahoo, Neb. BUFF LEGHORN, S. L. WYANDOTTES, B. P. Rock, W. H. Turkeys, Toulouse Gesse.
Mrs. M. E. OREWILER, Shelbyville, Mo. WHITE BOCKS exclusively; eggs, \$1.50 per 15 BOBT. B. HUME, Florissant, Mo IGH scoring Black Langshan eggs, \$1.00 per 15. for incubators, \$5.00 per 100. Large pure bred t. B. Turkey eggs, \$9.00 per 11. Mrs. J. T. Arvin Joanoke, Mo.

PRAIRIE HOME POULTRY YARDS. Bronse and White Holland Turkeys, Lt. nas, Silver, Golden and White Wyandottes, I and White Plymouth Books, Peafowls and Juness. Eggs for hatching. Mrs. J. A. JOHN/ Prairie Home, Cooper Co., Mo

BUYS 100 EGGS. \$1.20 one sit ing. \$2, 10 Bronze Turkeys eggs cling. \$2, 10 Bronze Turkeys eggs Either Brown or White Leghor Barred or White P. Rocks, o Black Minorca. Fanoy stock for saic. Circu lar free. E. W. GEER, Farmington, Mo.

EGGS, "YES" EGGS, are stock; all Thoroughbred. White are stock; all Thoroughbred. White and Be Books, Golden Wyandottes, S. (Pekin Ducks and White Guineas. ach. Order any kind wanted (sorder & B. Garbes, Box & W. Billings, Mo. not know from your own experience the the above is truth.

Armstrong Co., Pa.

W. H. TURKEY EGGS (16 to 21 lb. hens), 11, \$2; W. Rocks, 16, \$1; 100, \$3.50. M. CAMPBELL, Resemend, III.

suff and White Rocks.
s are pure Burdick Nuggets. White
impire strain; e.ges. E per 15 straight.
er of the Buff Rock Club.
T. S. LEWIS, Glasgow, Mo.

WANTED 1000 Fox Cubs always in the market. R. G. Mason, Kirksville, Mo After May 1, well furnish Eggs from our three 150 the very low price of 150 per sitting 1-2 the very low price of 150 per sitting 1-2 the very low price of 150 per sitting 1-2 the 150 per sitting 15

our orders.

NEPENTHE POULTRY RANCH,
NEW FLORENCE, M
dr. & Mrs. J. H. Kallmeyer, Prop. EGGS FOR HATCHING.

rom prise until mammota fronze Turke no, old tom 38 lbs.; hens 30 to 25 lbs. Eggm ser 9, \$5.00 per 20. B. P. Rocks and Buff Co core 91½ to 94½; eggs \$1 per 15. \$5 per 100. Mirs. John L. Galsor, Charlesto S. C. B. LEGHORN EGGS

BIG BRONZE TURKEYS angshaps as good as the best. Eggs from s, \$4 for 12; Chicken eggs, \$2 for 15. Mrs. Thos. W. Ragsdale. Paris, Mo

WHITE P. Rocks, bred for eggs and early ma turity; eggs, \$1.50 per 15. E. S. DUNLAP, Fulton, Mo.

FOR SALE—CANARIES, sed, \$2.50 a pair: extra fine sing ported Harts Mount ain Singer, ported Harts Mountain Singer, \$3.50; I trained whistling Canary, \$4.00. Fema apiece, Mrs. M. A. Bucknell, Alhambra,

CCC FROM PRIZE WINNING BARRED PLY Diampion Cockerel of West this year, Walnut King 4% at Missouri State St ow, mated with high class 35.00 per 13; 5 more yards of earse, \$1.50 per 13. Call on or address G. M. HOADLEY, Sedalia, Mo MAPLEHURST'S EGGS AT 11-9 PRICE

Fresh, Fertile and True to Name.
Eggs from Al birds in most popular or profitable
lasses vis. L. S., B. L.; B. P. K.; W. W. S. M.,
Y. and B. L.; G. S. Bants; P. D. and M. B. T.
Eggs! From exhibition matings 81.55 per 13;
5.50 per 39; out of standard breedors 750 per 18;
5.50 per 39; out of standard breedors 750 per 18;
5.00 per 39; out of standard breedors 750 per 18;
5.00 per 30; out of standard breedors 750 per 18;
and the standard breedom of the standard

EGGS FOR SALE

B. P. Rocks, W. P. Rocks, Baff Cochin and W. P. Ducks \$1.50 per setting, B. P. Rucks lat pen \$3.50, Most oggs from highly scored birds.
Mrs. J. W. ATTERBURY, JR., Madison, Mo.

EGGS from prise winning Barred Plymouth Rocks, \$2 per 15, and White Holland Turk-Regs, Eggs, nothing but eggs. Fresh and fertil from the best of Barred Ply. Rocks and Pekin Ducks pen No. 1, 22; pen No. 2, 21.50; ducks 21 per setting Mrs. G. F. TRESCOTT, WINFIELD, Mo.

EGGS FOR SALE. in Ducks. \$1.00 per setting. Lice destroyer 250 Mrs. H. H. ENGLISH, Cooper Co.. Speed, Mo

SPECIAL Empire Strain White Book Eggs \$1.00 per 15. Mrs. J. M. MAY, Wilson, Mo. EGGS B. P R. Rggs. \$1.00 per 15; \$1.50 per 80

Barred and Buff Rocks. kins blood Eggs, \$2,00 per 15, \$3,00 per 30 rom prise winners. Mr and Mrs. M. M. SMITH. Farmersville, Illinois

erent boiler is a practical failure. THE NURSERY.-Another considers tion is the nursery. When the tempera-ture of the eggs is 106 to 104 degrees, the emperature of the bottom of the tank will be about 115 degrees. The animal temperature of broody fowls is about 115 legrees. So, if the temperature of the egg chamber be correct, the chick, I judge, is not in danger of "baking its brains." Moreover, if the manufacturer's instructions for brooder heat be right-95 to 100 legrees—then his nursery arranger wrong. Only this afternoon the hermometer lying on top of the eggs reg istered 104 degrees; on the bottom of the nursery, 34 degrees; temperature of the fucubater room, 70 degrees. While a nur-tery may have its advantages, yet I beeve that the temperature therein is rather too low. Let someone else give his obrvations on this point.

The foregoing has most to do with hatching eggs in cold weather, when an incubator is put to its severest test. I still believe that fertile eggs can be profitably hatched by artificial means, and that a pure, humid atmosphere, with proper heat, will hatch them. J. B. D. Henry Co., Mo.

EGGS from choice White and Buff P. Rocks— Empire and Nugget Strains. Mrs. J. E. MAY, Wilson, Mo.

FOR SALE

D. T. HEIMLICH, Jacksonville, Ill. BUFF ROCKS S. L. Wyandottee and S. S. Hamburgs. Good game, try J. E. HAYNES. Amos, Ill. BOCKS exclusively for 15 years. Stock pure and bred from the best strains. Eggs for 15, \$2.00 for 30. Satisfaction guaranteed. Mrs. M. A. COTTEY, Knox City. Mo.

BRAHMAS exclusively: Eggs \$1.90 per 15.
M. B. Turkey eggs \$2.00 per 10.
Mrs. C. S. BOHBER. Vandalia. Mo. XPRESS PAID on eggs by giving extra num-ber, 21 years in the pure bred poultry business, have shipped fowls and eggs to almost every state. Mrs. K. Griffith, Calumet, Pike Co.. Mo.

TWENTY YEARS a breeder of B. P. Recks for \$1.00; 45 for \$3.50. Address F. M. LAIL, Marshall, Mo. Eggs, Eggs For Sale.

ing qualities, which I have achieved by breeding of Barred Plymouth Books ex-for over 20 years. Per setting of 15 eggs, C. C. ALEXANDER, Fulton, Mo. 1888., EGGS \$1.50 PER 15. 1901. High-class Lt, Brahmas, Buff Cochins, Black Lang-shans, Barred Ply. Rooks, S. L. Wyandottes, scores 90 to 95. H. T. REED, CAMP FOINT, ILL.

GGS—From White Wyandottes and White and Black Languhans, Good stook at \$\overline{a}\$ if or 15 eggs. E. O HOUCHENS, Ferria, Ill. WHITE P. ROCKS AND PEKIN DUCKS

re from 90 to 93%, have free range, no other; eggs for sale that will hatch, 12, gl.00 38, gl.00; 50, gl.00; 7.00. Mrs. Frank Franklin. Vinita, I. T 893 Eggs, \$1.00 Per 15.1901 h-class Barred Plymouth Rock, Black Lang-and single comb Brown Leghorns. Sunshine Poultry Yards, Irondale, Mo,

IDEAL POULTRY FARM.

J. M. STONE, Proprietor, breeder of S. L. Wyandottes, White Langshans, White Indians, Buff White Guines, S. C. B. Leghoras, Golden S. Hantams, White Guiness, Mammoth Bronner Turkeys, and White China Geosa. Eggs in .season. (Box. 9).

LANGSHAN Eggs from hens scoring from the state of the sta

C. B. LEGHORN EGGS. 16, \$1.00: o hens Birds have farm range. C. S. Jenkins & Wife, Bocheport, Boone Co., Mo

Barred Rocks exclusively, best strains, farm range, large and vigorous; eggs, \$1.00 per 15. Mrs. E. K. SIMPKIN, Griggsville, Ill ARGE English Berkshires, Toulouse Geese, B. P. Rock and Rose Combed White Leghorn chickens. Eggs cheap. Write me.
J. E. Burgess, Macedonis, Phelps Co., Mo.

Duroc-Jerseys and W. P. Rocks. Young stock after Sept. let. Eggs for hatching, \$1 per 15 or \$2 per 30. Address, B. S. Thomas, B. F. D. No. 4. Carthage. Mo.

FINE M. B. TURKEYS or sale cheap. Also a few B. P. R. Cockerels Iggs in season. MISS MARGARET W. SHIELS, Oaklaw Grange, Purdy, Mo Silver-Laced Wyandottes.

each. Eggs—\$2.00 per se by 1st, 3d, and 3d premium

E. R. KOONTZ, RICHARDS, MO., reeder of high class White H Turi . Wyandottes and Barred P. Rocks. PURE BLACK BREASTED RED GAMES

Cockerels \$1.50; Hens \$1.00; Trio \$3.00; Eggs \$1.00 per 13. MRS. L. M. MONSERS, Limestone Valley Farm. Smithten, Pettis Co., Mo. **Black Langshans**

Won First on Breeding Pen at Missouri State Show 6 Times in 7 Years. Who can beat this record ?

Eggs and stock for sale. W. H. RITCHEY, Sedalla, Mo.

Barred Plymouth Rocks (Exclusively)
Eggs from Best Matings, \$1.00 for 15, \$3.00 for 50, 500 for 100. Also a few choice Peland China E. E. AXLINE,

Oak Grove, Jackson County, Mo. White Holland Turkey Eggs \$2 fer 11 White P. Book eggs \$1.00 for 15. Mrs. DUFF BROWN, Linneus, Mo.









Allen's Lung Balsam







A Good Neighbor

ADVANCE We Sell Direct to Farmers

At Wholesale, a sell it any other way. You save the mid-profit and get the best all wire fence made, noe for circulars and special discounts.

WE DON'T PROMISE

frost is an about for catalogue THE FROST WIRE FENCE CO., Cleveland, C





Choice Lot of Sept. and Oct. Gifts to breed in May. A few males same age. Sold out on other ages. S. G. Richards, Sturgeon, Mo.

BERKSHIRES.

LARGE ENGLISH HERKSHIRES—48 buyers a pig of either sex, best of breeding.

B. P. B. Chiekens: White Turkeys.

GEO. W. McINTOSII, Monett, Mo.

POLAND-CHINAS.

LAND Chinas—We have some extra fancy silts of 180 lbs., and some fancy pigs of both sex of farrow to offer the trade. They are perfect and color, sired by U. 5. Chief Teoumash 2d. S. Perfect Know, Prince Hadiey and Marks' telester. Price. 180 to 815; money returned if it is not existantory. L. A. Spice Skeedding

Walnut Valley Farm Herd Poland China Swine. Black U. S. and Tecumseh Poland China Swine. Black U. S. and Tecumseb pigs and Jersey Cattle for sale. Black Langshar Eggs \$1.50 for 15. Hrneat W. Wallen, Monett, Mo.

VIVION & ALEXANDER,

POLAND-CHINAS, Gilt edge and individual merit combined. B. L. ORGAN, Carmi, White Co., Ill.

DUROC-JERSEYS.

ROSE HILL Herd of Duroc Jersey Hogs. Gilts ready to breed and boars ready for service, for sale. Prices reasonable. S. Y. Thornton. Blackwater. Mo.

BIG 2 HERDS Durce Jersey and Chester White Hogs. Top individucing crated. Write for let-live prices.

Duroc Jersey and Berkshire Hogs! Extra broot-ing. Satisfaction guaranteed or you may return at my expense. B. C. WAGENER, Pans, Ill.

50 DUROCS ready to ship; boars all ages no gilts; all registered.
[N. B. SAWYER, Cherryvale, Kansas,

FOR SALE A nice lot of fall pigs, sired by Mis-Perfection, dams are Look Me Over and B. U. S. breeding. Mags for setting from heat with the or setting from best strains of s; also breed Hereford cattle J. E. SUMMERS, Huntsville, Randolph, Co., Mo

SHROPSHIRE RAMS,

all yearlings, for sale; also my stud ram for sale or trade for one as good. Address L. G. JONES, Towanda, Ill.

BED WETTING CUPED, Sample FREE



The Pig Pen.

Editor RURAL WORLD: In answer to Mr. G. D. Davis let me say that I have been raising and breeding the belted hogs he speaks of whitebandaroundthemiddle, and black ends) for the past 30 years, and consider them the best hogs in the world. They will fatten at any age and I have known them to weigh from 700 to 800 pounds. In May, 1900, I had three pigs shipped from Kentucky, my old na ive home, making the third shipment ince I came to Missouri. In Kentucky hey are called the Kentucky thin rind hogs, and have always brought more money on the Cincinnati market than

any other kind.

I have 40 half-bloods, and also som pure breds for sale. R. T. TANNER. Howard Co., Mo.

POTATOES POISON PIGS

Did it ever occur to our readers that here is danger of domestic animals being poisoned by potatoes? As is well known, the potato plant is closely related bo-tanically to night shade that is popularly regarded as being highly poisonous In a valuable bulletin that has just com

hand from the Division of Botany, U. Department of Agriculture, on the tock-Poisoning Plants of Montana, we

find the following statement:
"On a stock ranch in the Flathead Valley six pigs died from eating uncooked potatoes. The potatoes had all sprouted and were considered of no value, except for feeding. As soon as it was found that they were poisonous in an uncooked condition, the owner of the pigs cooked some more potatoes in the same condition, and fed them to other pigs without causing any poisoning. The symptoms of poisoning by this plant were a slowly progressing paralysis, which became complete after about 24 hours, an in-

reased salivation, and a regurgitation of he stomach contents."

The sprouting of potatoes and their exposure to the sunlight, causing them to become greenish in color, seem to develop the poisonous principle,

THE SUPPLY OF HOGS.

The man who raises plenty of corn and then raises plenty of hogs to consume it, is putting his product where it will do the most good, says "Drovers' Journal. Hogs are relatively high now and accord-ing to the best information obtainable, the supply in the country is somewhat below the normal at the present time. How ever, the best posted men on the hog sit uation have been mistaken on forecasts of this kind and one is bound to admit that the country is large and that it is impossble to get accurate statstics on the growng crop. There are many who believe that the light average weight is an indiation that the later supply will be short cation that the later supply will be short, basing their judgment on the theory that no heavy hogs are available, because if they were the premium that they are commanding would force them in. Without question the marketing of so many young hogs now means less to come later on, whether the shortage will be serious or not remains to be seen. So far this or not remains to be seen. So far this winter the eastern supply has been quite large, at least large enough to keep ship-ments down to a comparatively low fig-ure. It is generally believed that this supply has been pretty well marketed and so the coast is clearer for a better de-mand from this source later on. Perhaps the high price of corn has discouraged many farmers from feeding as many hogs as usual, but even with corn at presen rices there could be no better inv nan converting it into pork.

The "Never Root" Hog Tamers

RAISING HIGH-CLASS HOGS.

I do not claim that there is anything new in my method of taking care of When my pigs are farrowed it is my intention always to give them plenty of exercise and to feed the sows a balanced ration of milk-producing food. As soon as the pigs are large enough to eat, a small pen is provided into which they can go at will. A slop made of wheat middlings and milk is given them. The pigs soon learn to eat and when ready to wean, which should be in 10 to 12 weeks, they will hardly miss the milk from the They should be kept growing as rapidly as possible, and if intended for the butcher I would advise feeding a arger percentage of fat-producing food than if intended for breeding purposes, writes Geo. W. Jessup of Indiana in the "N. E. Homestead."

"N. E. Homestead."

My pigs to be kept for breeders are fed grass or other pasture is beneficial. I grass or other pasture is beneficial. I always give my hogs pure water, clean quarters and plenty of exercise. The sleeping places are disinfected regularly and I always try to keep the hogs and pens free from vermin. My herd has never been troubled with cholera or contagious diseases of any kind and is always in excellent condition.

RAW VS. SCALDED CORN MEAL FOR PIGS.

An experiment has been conducted at An experiment has been conducted at the Midland Dairy Institute in order to determine whether it is more profitable to feed maize (corn) meal to pigs, in ascalded or raw condition. Twelve pigs of Middle White breed, all of one litter, were divided into two lots of six each, the difference in the weights of the two lots being only 16 lbs. Each jot was given the same quantities of maize meal and whey, the only difference being that lot one received it. tities of maise meal and whey, the only difference being that lot one received its maise meal raw, and the other lot scald-ed. They were fed twice a day—namely, 7 a. m. and 4 p. m. In the case of lot one, raw maise meal was put on to the surface of the whey, but the scalded meal was prized with the whey in the tough for lot mixed with the whey in the trough for lot wo. The experiment lasted between Sepone made a total gain in live weight during that period of 925 lbs., as against 330
lbs. for lot two, an average gain in the
one case of 1.54 lbs. per head, and in the
other 1.39 lbs. The dressed weights of the
lots were respectively 1,200 lbs. and 1,136
lbs. The percentage carcass to live weight
in lot one was 73.7 lbs. and in lot two 76
lbs. Both pens were sold at 82. 9d. per
score of 20 lbs., lot one bringing 168. 3d.
more than lot two, which was reduced to
lls., after deducting the estimated value ne made a total gain in live weight dur-

of the extra 16 lbs. at the beginning of the experiment. The butcher's report indicated that both

lots were of good quality, although the lot fed on raw maise meal were rather better in color. It is deduced from these experiments, therefore, that the trouble of scalding maise meal is not repaid, that maire meal in the raw state is more nour than scalded maize meal.-London (Eng.) Farmer.

RAISING TOP-OF-THE-MARKET

Last year on March 15, 1900, B. S. Hana walt, a brother-in-law of mine, marketed a car of hogs in Chicago which averaged 304 car of hogs in Chicago which averaged 394 pounds, writes Will N. Sargent in the "Prairie Farmer." This year he marketed 57 hogs averaging 305 pounds and he received the top price for that day (March 27, 1901). The following is his method of breeding, feeding and finishing top grade hogs for the Chicago market. He selects his brood sows in December. does not force them with feed, but gives them plenty of room for exercise, or range if weather permits. He chooses animals having good strong bone and standing well up on their feet, barrel-ribbed, with well up on their feet, barrel-ribbed, with hem and shoulders, and the back as hem and shoulders, and the back as rians in Missouri. The reason is that as rians in Missouri. The reason is that as reason with the great horse and cattle. straight as possible. No hump-backed, small-boned, narrow-ribbed, small ham or shoulder sows are kept for breeding purses. Another good point in a brood sov is width between the eyes, as grandfather used to say, "A good brain pan," that se cures almost to a certainty a gentle an good mother. Mr. Hanawalt gets a thrifty male pig with above-mentioned good points together with good length. Some-times he gets one that has a recorded pedigree. If he cannot find his ideal boar of breeders, he keeps looking till he finds ne. If he gets him from a neighbor, he

Christmas Day he generally breeds the first sow, two a day if they come so. After service the sows are turned out and given free range as far as possible for the winter. They are handled gently at all times and do not know what a scare is or his money makers, consequently his pets As soon as spring comes, he grinds bar ley or oats and corn, equal parts, fine, and makes a slop, letting it soak about 12 hours, never over 24 hours, but keeps it fresh at all times. After grass starts, the sows' systems are in loose condition and the pigs come along when the cold April showers and snows are gone, and thrive from the very first. He gradually gets the sow on to full feed and slop afte farrowing. As soon as the pigs get old enough to look around for feed and good things he provides troughs outside in another yard where they can go and ge their slops without the big hogs bothering them. Last summer he fed 1,200 pounds of Red Dog flour, 1,000 pounds of shorts, and possibly 30 bushels of ground grain in the way of slops for 150 head of sows, pigs

of cattle to feed; in December he selecte his brood sows, having marketed his old sows in the fall, and let the remainder follow the cattle which were fed stock food, clover hay and corn. The hogs were thus finished and marketed in with the cattle, with results as stated in the beginning of this article. The year before the hogs were separated and yarded in Janu-ary and fed corn and slop. About Febru-ary 1 he cooked feed for them morning and evening-eight pails of water with barley and corn ground and stirred into a thick mush. This was diluted or thinned out so that the hogs could druk it. This fed twice a day brought his hogs to the 804-pound finish March 15, 1900.

The breed of hog he likes best is the Poland-China, but the ideal shape has to never wean a pig, the sows do that them-selves and save me the trouble." He al-ways keeps lime-slacked ashes and salt where the hogs and pigs can get all they want. There is always water in the pas-ture or lot in addition to what he feeds in slop. The hog cholera has not visited him for fifteen years, while his neighbors have frequently lost nearly all within a mile of him. He says "Nine-tenths of the pedigree of a hog is his feed after he is born and the other tenth is feed before he is born. Of course, 'blood tells,' but

PIG PEN POINTERS.

RINGS OR TAMERS.—A reader would like the opinion of others who have had experience as to whether it is better to use rings or a "hog tamer" to prevent

MESSRS, HARRIS & McMAHAN, La-

The Shepherd.

MISSOURI SHEEP BREEDERS' ASSO CIATION.

Norman J. Colman, President, 1214 Chemical Building, St. Louis, Mo. L. E. Shattuck, Secretary, Stanberry,

SHEEP DISEASES.

The following paper by Dr. T. E. White former Missouri State Veterinarian, Se-dalia, Mo., was read at the late meeting of the Missouri Sheep Breeders' Asso

ciation: As an apology for the measure matter presented, I must state that my experience with diseases in sheep has been very limited, and I may say that I believe it can be safely stated that He selects his brood sows in December, does not force them with feed, but gives them plenty of room for exercise, or range known it would be found that I say industries, sheep raising especially in Missouri, is still in its infancy, and as a natural consequence there are necessarily fewer patients. There is also another sult from overwork and duties too pro-

great strain, except in the processes of digestion, resisting extremes of climate ergencies of gestation and par turition. The results of these physiological phenomena are of an acute kind in the majority of cases and the low value of most sheep with their utility as human food causes all cripples or slightly dis-eased animals to be withdrawn from the preeding flock and fattened at once for the butcher or, in emergency, slaughtered without fattening. Breeding ewes and rams occasionally afford interesting pathological conditons; but these cases are

rare and can easily be counted.
PLETHORA.—Of the diseases that come under the heading of simple disorders of the blood and that have their origin in irgularities and defects in management ethora perhaps heads the list. Properly speaking, up to a certain degree this con-dition can hardly be defined as a disease, but at the same time when a sheep makes blood too rapidly as a result of too high feeding, this high condition must be looked on apprehensively if serious plethoric disorders such as are apt to occur claimed by many enthusiasts that the to eves during pregnancy, are to be avoided.

PARTURITION FEVER always affects ure, be one of the leading meats on the

only the best ewes of the flock, especially if allowed very rich food, near the lambing time and the exercise necessary for its good health, has not been sufficient. In ich cases it occurs apparently as an epizootic, but if the cases are investigated it will be found that these enzootics are always due to an absolute and exact uni-

ANEMIA.—Another of the blood disases of sheep is that of anemia, a condition, while though just the opposite of plethora, is equally if not more frequent mong sheep and also arises from mismanagement of various kinds. Anemia ccurs when the blood formation is check- days ago. be there even if there is no pedigree with the sire each year. He often says, "I vere strain on the system, for instance, when a ewe is compelled to suckle her lamb on insufficient or innutritious foods. One form of anemia, and I have come across a number of these cases in my practice, is a dropsy which commences near the udder and often extends to the fore legs. This sometimes occurs, as an ensootic, about a week after shearing, but will quickly yield to tonic treatment. The disease is readily diagnosed by paleness of the skin, pale, visible mucous membranes, pale tongue and a general want of vigor. The most frequent seat of

the disorders into two classes—parasitic and dietdic. Among this latter class the most important cause he finds is that of feeding sheep on too uniform a diet. SHEEP-POX.—Another blood disease,

but specific in its nature, is that of sheep-pox, or Ovine Variola. This is one of the most formidable plagues of sheep, befor growth, bone and muscle rather than fat. Treated in this way they have given much better results than when fed a more fattening ration. I do not think exclusive corn diet gives the best results fand would advise feeding some slop made from wheat middlings, ground cats or some similar feed. A run on clover, blue trans or other pasture is beneficial. I

der existing law, in Missouri, it can easily be brought into our state from other

Revised Statutes 1899, volume 1, page 638, section 2330. Importing diseased sheep—
"If the owner of sheep or any person having the same in charge, shall knowingly
import or drive into this state sheep having any contagious disease, knowing the same to be so diseased, to run at large upon any common, highway or uninclosed lands, or sell or dispose of any sheep, knowing the same to be diseased, he shall be described. be deemed guilty of a misdemeanor.

(To be continued.)

PROFIT IN SHEEP HUSBANDRY.

The late Maj. Campbell Brown is well nembered as one of the largest and est successful stock-raisers in the South, says the "Tennessee Farmer." He had on his magnificent Ewell Farm tract a large area of nice hill lands admirably adapted to sheep husbandry which he took great pride in. His sheep were nearly all pure bred and numbered severa hundred head. He was constantly im-proving his flocks by the introduction of new and best blood. His only embarrase rians in Missouri. The reason is that as now and best blood. His only embarrassment was from incursions of worthless
industries, sheep raising especially in Missouri, is still in its infancy, and as a natural consequence there are necessarily
fewer patients. There is also another
reason not so obvious—namely, that a
large proportion of the race of sheep undergoes slaughter before the diseases of
senility, or even adultism, set in. Thus
few really chronic diseases attract our attantion in owine pathology, and few of
fave personal supervision over its stock.
Fave personal supervision over its stock.
Fave personal supervision over its stock. tention in ovine pathology, and few of those serious changes of the skeleton, circulatory and digestive systems which remaimed nearly 100 head, including the Alexander bucks and ewes, and he was so discouraged that he abandoned sheep hus-bandry as a collateral industry of profit. His sons, who succeed to the Ewell Estate have always kept a few well-bred sheep, and frequently buy up a number of this kind and by giving them the advantages of good care and access to the luxu riant pastures would sell them off as so as ready for the market. Mr. Geo. Campbell Brown informs us that their last purchase was in November, 1899, of 109 head, for which they paid \$376. They were sold in March, only keeping them for months, for \$331. For the investment as care what character of business wou bring in more profit?

There is a growing demand throughou the State to give the sheep at least s dog's chance.

ANGORA GOATS

Angora goats are valuable mainly for three purposes-for clearing brush land for venison and mohair. It is said that packing houses as mutton and consumers cannot tell the difference, and it is

oming more and more important. Here tofore, most of the mohair used in this country was imported from Africa, where the Angora industry thrives. But the fine, formity of conditions whereby the cause long staple variety of the southwest is may act just as readily on many, as on now being used in the dress goods mills of the east and the importation has almost ceased. "The manufactories will hence-forth look to the great southwest, with Kansas City as a center, for their supply The future of the Ango lustry in that section is assured, an eastern cloak manufacturer a few

> But after all the most important value of the Angora is as a brush cleaner, and most of the purchasers supplied them selves with flocks for that purpose. ondition. These goats will soon conver

it into an open blue grass pasture."
Dr. J. J. R. Stanley of Plattsville said:
"A few years ago I turned a flock of Angoras into 640 acres of brush land that was not worth a penny to me. In two ears' time I had 640 acres of the fin wrong feed tells just as quickly." You these dropsical effusions, however, is benefit and shorts and branch and shorts an ets out by the roots. Is it not true, how ever, that the Angora needs no care and will just pick the dollars off the bushe

The goat breeders believe that there is

Medicine should not be given to nursing ewes, as it mostly goes into the milk, and the young lamb may get too much of it As the warm weather comes on, the un-

shorn sheep will need some careful watch-ing, and this again as soon as their winter coats are off. Why is it that one man will succeed in

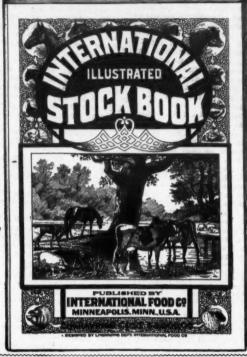
reeping sheep while another does not? We ion't say cannot, for he can if he knows the how to do it of it.

THE SHEARING MACHINE.

Dear Sirs: The Sheep Shearing Machin forwarded to my address reached my farm only last week. I had the privilege of seeing it in operation on Saturday last, of seeing it in operation on Saturday last, and I pronounce it an undoubted success. My Shropshire yearling rams are wooled from their feet to the point of their nose, and I had some doubt in my mind that your shearing machine should possibly be useful in taking the wool from the legs and belly, where it is always more or less matted on account of the sheep having lain in damp places. I found, to my amazement, that it took it off without a scratch and very rapidly. As to the body, there was no difficulty whatever. Your machine saves wool, saves time, saves labor, and saves the sheep, and I prophesy that it will soon be in general use all over the country. Yours very truly.

Minister of Agriculture, Ontaria.
The Chicago Flexible Shaft Co., Chicago.

000000000000000 \$3000 STOCK BOOK FREE



CASH CAPITAL INTERNATIONAL FOOD CO.,

The Three Million Acre

FARWELL RANCH in the Panhandle of Texas

FOR SALE IN TRACTS TO SUIT.

The land is largely chocolate or black sandy loam, deep, rich, capable of producing forage crops in great abundance. It is thickly coated with buffalo, mesquite, grama, sedge and other choice grasses Rainfall ample for production of forage crops, grasses and fruits. Admirably adapted for Grapes, Pears, Peaches, Apples, Plums, Melons, etc. An inexhaustible supply and excellent quality of water is procurable at an average depth of 125 feet.

The altitude varies from 2300 feet at the south to about 4700 at the north. The temperature is equable and the climate unexcelled for healthfulness. This is the best cattle and stock breeding country in the world. Panhandle cattle are of very superior quality, a carload of steers bred on this Ranch having been reserve number for the grand champion carload of fat steers at the International Live Stock Exposition in Chicago, December, 1900. The stock subsists on the pastures the entire year, finding very nutritious food in the cured native grasses. This is an unprecedented opportunity for those desiring to engage in the stock farming business or for investors willing to hold for appreciating values. The small ranchmen in the Panhandle have made more in recent years for the capital and energy invested than the farmers in any section of our country.

The Ft. Worth & Denver City Ry, traverses the north end of this land, the Peace Valley and Northesstern Ry, (part of the Sants Feaverse)

The Ft. Worth & Benver City Ry, traverses the north end of this land, e Peces Valley and Northeastern Ry. (part of the Santa Fe system) e south end, and the Chicago, Bock Island and Pacific Ry. is concucting a line from Liberal, Kas. to El Paso, Texas, which will soon werse the middle of it. Title perfect. Will be sold in solid blocks to suit purchaser for cash or

very liberal time payment.

To inspect lands call on A. G. Boyce at Channing, a station on the ft. Worth & Denver City Ry. in Hartley Co., Texas, and for full particulars write him or Wm. Boyce, agent, Amarillo, Texas; or Geo. Findlay, agent, 148 Market Street, Chicago, Ill.

Send for a strictly up-to-date BERKSHIRE Boar or Sow worth the money.

Write J. T. POLLARD. FULTON. MO.

Dip & Wash (for Live Stock)



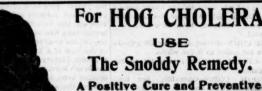
Dipping, washing or spraying live stock is essential for the cure of Scab, Mange, Itch, etc., and for killing and posed of nicotine, sulphur and valuable oils, but contains neither lime nor arsenic. It is effective but not Write for literature upon poisonous or injurious. treatment of stock for skin parasites.

PASTEUR VACCINE CO., 56 Fifth Ave., Chicago. Branch Office, 621 Whitney Bidg., Kansas City. Mo

Cedar Lawn,
Breeder of registered Shropshire Sheep, Poland China Hogs and Shor
Bronse Turkeys and Barred Rock Chickens.

E. H. Rodgers, Proprietor,

FINE BERKSHIRES Of the best families at farmers' prices. Write for what you want, or what is better, come and inspect the stock W. H. KEE, Prairie du Bocher, Illinois.



The Snoddy Remedy. A Positive Cure and Preventive

Only case Dr. J. H. Snoody and one SKODDY H. for Hog Cholers which is made only by no. Dr., is picture is on each neckage. Beware of lunisations, eaps no substitutes. Write to-day for Dr. Snood bookles on Hog Cholers and circulars and used about his remedy. Address, The Dr. J. H. Snoddy Remedy Co. Branch House Des Moines, Ia. Alten, Ill., V. S. A

ANGORA GOATS FOR SALE.

W. T. McINTIRE, Kansas City, Mo., is the largest dealer in Angora goats in the West. He has on hand a splendid lot of registered bucks and does various ages, and also a lot of high grades including some wethers. His advertisement will be found elsewhere in this issue. Look it up and write for particulars and prices.

I have 500 High Grade Angora Does, yearlings and two-year-olds for sale. Eighty head of recorded Does, also 500 head of two and three-year-old wethers. Parties desiring goats would do well to correspond with me before buying elsewhere. Address

W. T. McINTYRE, Agt., (KANSAS CITY, MOS.)



HAYNERS DAYTON OHILUSA

sand customers throughout the United States use our whiskey. Ample testimony as to its purity and quality, is it not? Save the enormous profits of the middlemen. Such whiskey as we offer for \$3.20 cannot be had elsewhere for less than \$5. Our distillery was established in 1866. 33 years' reputation is behind our whiskey.

One hundred and fifty thou

THE HAYNER DISTILLING CO. 308-307 8. Seventh St., St. Louis, M.

SUNNYSIDE HERD OF PRIZE WINNING. UP-TO-DATE BERKSHIRES. Six boars ready for service for \$25.00 each, that will make show boars; targe of them sized by Lord Fremier 5000l, out of a show sow. Ten nice young sows bred to farrow in June; we will sell for \$25.00 to \$35.00 each, guaranteed in pig. Correspondence collected, inspection invited.

HARBIS & Montalan, Lamine, Cooper Co., Mo.

The Markets

WHEAT-Cash Markket-Lower WHEAT—Cash Markket—Lower and dull, the only demand of consequence for hard winter, which in scanty offering. By sample, No. 2 red sold this side at 53%c for Western, to 76,74c, and E. side at 75%67c, No. 3 red at 72c to 74c; No. 4 at 62c to 70c; No. 2 hard at 74%c to 74c, and Turkey 75c; No. 3 hard at 25%c for China. CORN—Cas hMarket—Lower and quiet, the larger offerings causing some buyers to hold off, but a pretty good shipping

to hold off, but a pretty good shipping demand; No. 2 sold to Texas basis, 50c in St. Louis, and No. 2 white at falc; spot No. 2 and No. 3 sold del. E. side at 44%c, and 2 and No. 3 sold del. E. side at 44%c, and No. 3 at 45665%c and No. 3 white 44%c for poor to 45c. ATS—Cash Market—No. 2 sold at 25629%c; No. 3 at 25%G256 for fancy; No. 2 Northern at 25629%c; No. 2 white at 29%G No. 3 white at 25629%c; No. 4 white at 25c, mainly at 25%c. No. 4 white at 25c, mainly at 25%c.

at 25c, mainly at 294c.

RYE—Firm. Grade No. 3 sold at 54c, COTTON-

and No. 2 worth 55c E. side.

MILLFEED—Spot offerings small and held firmly. Skd. bran salable to go South at 73c f. o. b. boat, and to Eastern buyers at 72c E. trk., but 100 tons for first haif May shipment sold at 70c. At mill bran sells at 76c and ships at 80c. HAY-Offerings entirely too large for the demand on E. side and buyers generated.

ally holding off. Current rates on trk. for timothy \$13.50 for choice; \$12@18 for No. 1; \$10.50@11.50 No. 2; \$9@10 for No. 3; prairie, \$10@10.50 for No. 1; \$9@10 for No. 2; \$8@8.50 for No. 3. Clover \$9@12.

	ON CHANGE	
The following tal	oles show the	range of
prices in the future	and cash gr	ains:
Closed	Range Monday.	Closed
Saturday.	Monday.	Monday
Wheat-		4767.79
May75%	74%@73%	73%
July72% @72%	721/2@707/2@71	71¼ b
Corn-		000200
May4414	441/6/243%	44 b
May44% b	44%@43%	43% b
May281/4 July36 b		2814
July36 b	2614 @26	261/a a
Cash wheat, corn	and oats.	
	e Range	Range
	Yr. Saturday.	
Wheat-	The state of the state of	
No. 2 red711/200	72 7614@7614	731/2@75%
No. 3 red69 @	7414/0/75	72 @74
No. 4 winter.63 @	69 6973	62 6070
No. 2 hard 6414@		
No. 3 hard 62%@6	3346 74 007434	72 @731/2
Corn-	- 12 . 1 W. 14/3	12 091072
No. 240%@	11 4514@46	44%@45%
No. 340 @.		411/40945
No. 2 white.41 @		
No. 3 white.401/4@.	45%@	441/2/00/45
Oats-	10740	4475/040
No. 22514@2	MELL 951/49993/	29 @2914
No. 32434@.	281/4@	
No. 2 north.25%@2	NO 2074 (0)	2072(429
Avo. & north.zb%(d/2	6 28%	29 @291/4

COTTON—Local spot quotations—Ordi-ary, 6 7-16c; good ordinary, 6 15-16c; low addling, 7 9-16c; middling, 8 3-16c; good iddling, 8 11-16c; middling fair, 9 1-16c. WOOL—Quiet and easy. The heavy amount of stock carried over from last year and the discouraging outside advices, cause dealers to be very cautious buyers. ets of new, while comparatively small thus far, are increasing steadily; but not enough sold as yet to show the ac-curate position of prices or test the extent of the demand. Some light bright clear staple (on combing order) sold at 17%c, but anything falling off in quality from

that standard sold much lower.
Missouri and Illinois—Medium combing, 174,6718c; medium clothing, 174,671%c; 618c; braid and low, 1861614c; burry and clear mixed, 14@16c; slight burry, 13@14c; hard burry, 10@11c; light fine, 14@15c; heavy fine, 11@12c; lamb, 15@16c. Kansas Nebraska-Bright medium, 16@16%c; dark and sandy, 13@14c; fine medium, 13@ 14d; light fine, 13@131/2c; heavy fine, 10@11c. Texas, Indian Territory and Oklahoma— Medium, 10c; coarse and low, 12@13½c; fine nedium, 12@13%c; light fine, 12@12%c; heavy fine, 10@10%c. Arkansas and South--Medium (fleeces), 17@18c; medium se), 16c; burry, 11@13c; hard burry, 9@ Tubwashed-No. 1, 27c; No. 2, 21@ burry, 17@18c. Angora goat hair-Clean and clear, 15c; burry and cotted, 8c. Black and seedy at from 4c to 6c per d less; 15c allowed on old and 20c on

EGGS-Lower and quiet. Good run of stock at 10½c. Demand light. The warmer weather prevailing is beginning to show the usual effects on offerings. Some dealers will buy only on a loss off basis and all are very particular about quality BUTTER-Drooping and tending down

in price. In anticipation of a decline, the trade is holding off, and no demand save what little comes from retailers to supply their immediate wants. Roll and country store-packed lower. Offerings increasing. Creamery-Extra, 20c; firsts, 17@18c; sec onds, 16c. Roll-Choice, 11c; good average, 10c; poor to fair, 6@9c. Grease, 5c. Dairy—Extra, 186; firsts, 126140: Ladie-packed—Extra, 12614c; firsts, 12612%c. several large and prosperous broom mak-Store-packed—Choice, 10c; poor to fair, 66 ing plants in that little city. There are several large and prosperous broom mak-ing plants in that city, and every year an 9c. In a small way ½c per pound or more is charged over the foregoing quotations. 9c. In a small way ½c per pound or more is charged over the foregoing quotations. CHEESE—Jobbing: Twins, 11½c; sin-

gles, 11½c; Y. A., 11½c; New York, 11c. Limburger, 121/2013c. Swiss, 150151/2c. POULTRY-Chickens - Average

for light to 14 a doz. for those weighing from 1% to 1% lbs. By weight, 16620c per

Turkeys—Light hens 969%c; heavy toms 7 68c. Ducks 8%c. All poor stock, including sour, sweating, thin, scrawny, etc.,

at 60c for mixed to \$1 for white.

per gallon.

BROOM CORN—Quotable, per ton: plentiful and dull at \$40000, fair \$5000, choice in demand and \$40070—latter for bright green

GRASS SEEDS—Most kinds out of season, including clover, timothy, redtop bluegrass, etc.—these all nominal in price

The per 100 to arrive.

BUCKWHEAT—Nominal at \$1.5691.30 Miller, Ill.

ferior less.

HEMP SEED-Latest sale at \$2.80 per

100 pounds pure test. DRIED FRUIT-Market quiet and not inal, offerings being very light, while the demnad is confined to strictly sound fruit -the latter ruled firm in price: but

ormy, dark or inferior goods dead wormy, cark or interior goods dead dull and weak. Apples: Evaporated—Rings at 3% to 4c, quarters at 3c to 4c, chops at 46%c, peelings at 4c; sun-dried—quar-ters at 2462c for good—inferior less. Peaches at 1c to 1½c per pound.

WHITE BEANS—Hand-picked

beans in a jobbing way from store at \$1.98 @2.00 per bushel; screened at \$1.92@1.35 per

ulated, 31 per barrel; worth 5c per barrel more this side. ROOTS Ginseng at from \$3.50 for small

ROOTS—Ginseng at from \$3.50 for small to M for large; lady slipper at 70g Seneca at 26c; pink at 14c; golden seal at 43c; May apple at 2½c; snake at 23c; black at 3c; angelica at 3½c; wahoo—bark of root 8c, bark of tree 2½c; blood 2½c; blueflag 3c; skull-cap leaves 5c; sassafras bark 4c; wild ginger 4c. wild ginger 4c.

LIVE STOCK.

HORSES—A phenomenal run, considering the time of year, was reported for the regular auction, the special sale which takes place this week acting as a magnet for receipts in the "bull ring." Somewhat over 400 head were embraced in the auction run at noon, and the indications are that the general week's arrivals will be far above the recent average. The quality, too, represented great improvements, embracing many choice consignments of HORSES-A phenomenal run, consider ity, too, represented great improvements or embracing many choice consignments or chunks that sold at a range of \$100 to \$140. Good to choice drafters were more plenti-ful at \$150 to \$197.50, pairs bringing \$276 to ful at \$150 to \$197.50, pairs oringing \$25 to \$350. The demand for British horses remains a feature of the market, the movement being brisk and values strong. An unusual week is in front of the trade.

Horse quotations: Heavy draft-Common to good, full to 150; choice to extra, \$160 to \$200. Churks, 1,150 to 1,350 lbs.—Fair to good, \$75 to \$90; good to choice, \$95@120. Coach horses and cobs—Fair to good, \$185 to \$175; choice to extra, \$200 to \$500. Horses for the South, small, light drivers-Fair to good, 275 to \$40; choice to extra, \$50 to \$65; Southern drivers, large, 80 to \$15. Export chunks, 1,200 to 1,400 lbs.—Plain to cond, 405 to \$10; choice to extra, \$115 to \$135. Business drivers—Fair to good, \$85@110; choice to extra, \$125@160. Saddlers for Southern use, fair to good, \$60@90; choice to extra, \$100@160; fancy-gaited New York saddlers, \$150@300 Inferior horses, common, small plugs, \$12.50@30; heavy work plugs, \$25@45. MULES—The receipts were unusually

large for the season, aggregating around 350 head during the forenoon; about 5 oads of these went to local dealers, the remainder being available on the com-mission alleys. Trade was principally on British "war" mules, and receipts in the majority of cases conformed to that denand. Dealers have unfilled contracts on and, and are busy securing a sufficiency. However, the inspection of these grade lately has been extremely critical, and the energies of the demand are directed main bringing strong comparative prices. A few Eastern buyers are on hand for min-

ers and choice heavy team mules.

Mule quotations for broke mules, 4 to ers and choice heavy team mules.

Mule quotations for broke mules, 4 to 7 years old:

14 hands, extreme range... 14 65.00 to \$70.00

14 hands, bulk of sales... 50.00 to 85.00

14½ hands, extreme range... 55.00 to 70.00

14½ hands, extreme range... 55.00 to 70.00

15 hands, bulk of sales... 55.00 to 70.00

15 hands, bulk of sales... 80.00 to 15.00

15 hands, bulk of sales... 80.00 to 15.00

15½ hands, extreme range... 80.00 to 155.00

15½ hands, extreme range... 150.00 to 155.00

15 to 15½ hands, extreme range... 150.00 to 155.00

18 to 15½ hands, sut range... 105.00 to 155.00

18 to 15½ hands, bulk of sales115.00 to 125.00

ADDITIONAL LIVE STOCK MARKETS ON PAGE 4.

MR, AUG. POST, Moulton, Iowa, vertises Binder Twine in this issue. We have known Mr. Post for many years and recommend him as a thorough and honorable business man. Write him for prices

GROW BROOM CORN.

The other day, while a "Monitor" reporter was in our neighboring town of Centralia, his attention was called to the magnitude and growth of the broom mak-

town. This started a train of thought in the mind of the reporter. The people of Mo-berly have been doing some hard thinking lately about the stimulation of our indusreceipts, hens 8c; roosters, old or staggy trial interests. We have thought of electronic forms, 7c; coarse old toms, 6c, covers, brick plants, etc., yet we have Ducks 8c. Geese (top for full-feathered) our industrial development, when we Spring chickens selling at from \$2.25 a doz. but little money is required to start the business. We have talked with some of from 1½ to 1½ lbs. By weight, 16620c per pound.

DRESSED POULTRY—Iced stock, us that the soil of Randolph will produce calded and undrawn, with head and legs as superior quality of broom brush, and yet we cannot recall having seen an acre Chickens—Average run Sc; roosters 4½c. of broom corn in this county in the past turkeys—Light hens 969%c; heavy toms 7 part of our farmers seems inexcusable in view of the fact that for several year ng sour, sweating, thin, scrawny, etc., broom corn has averaged \$100 per ton. If the failure to grow broom corn grows out at 60c for mixed to \$1 for white. or the lack of a nome market, let us start
a broom factory at once. We will grow
the brush here, make the handles and the
brooms here, and distribute the wages for
making the same among our own people.
It may look like a small thing, but it will
be a strong link in the industrial chain.—
Moberly (Mo.) Monitor.

CAREER AND CHARACTER OF ABRA-HAM LINCOLN.

bluegrass, etc.—these all nominal in price.

Hungarian would probably bring 65675c, and millet 75c to \$1.10, but none offering.

STOCK PEAS—Latest sales of whippoorwill were at \$1.37@1.35 per bushel.

SORGHUM CAME SEED—Latest sale at \$1.30 per 100 pounds.

KAFFIR CORN—Last sale (mixed) at \$1.50 per 100 to arrive.

BUCKWHEAT—Nominal at \$1.35@1.35 per 100.

Handdress by Joseph Choate, Ambas—sador to Great Britain, on the career and character of Abraham Lincoln—his early slife—his early struggles with the world in character as developed in the later years of his life and his admistration, which placed his name so high on the world's roll of honor and fame, has been published by the Chicago, Milwaukee & St. Paul Railway and may be had by sending six (5) cents in postage to F. A. Miller, General Passenger Agent, Chicago, Ill.

that this will be one of the most instructive and interesting addresses delivered before the convention.

In addition to the gentlemen named, it is more than likely that Prof. Shaw, a well known authority on beef cattle, will address the convention on one or more

The interest in the convention is grow the program are a sufficient guarantee se attending will be repaid for the money spent in making the ANDREW M. SOULE, trip.

Asst. Secretary, E. T. F. C. Knowville, Tenn.

SORGHUM FOR FORAGE.

Mr. H. B. Miller, of the firm of Miller Bros., extensive stockmen, farmers and feeders in Osage Co., Kansas, after many years of experience and close observaforage that can be grown for cattle, after having tried Kaffir corn, millet, etc. Miller Bros. raise and use from 250 to 400 acres of this sorghum each year, and Sec retary F. D. Coburn of the State Board of Agriculture has secured an article from Mr. Miller setting forth his views as to the best method of preparing the soil, seeding, how and when to harvest, etc., etc., from which the following is

We plow and prepare the ground thor oughly first: then use a Dowagiac twelve foot press-drill, drilling from one and a half to two bushels of seed to the acre from one and a half to two inches deep Sometimes when rushed with work we use a seed sower attached to the rear end of a farm wagon and sow broadcast, then harrowing the ground thoroughly. This latter method is usually successful, but not as satisfactory as drilling the seed in as the seed does not germinate so soon and a part does not get covered at all. If the ground is inclined to be foul the weeds get started first, choking the sorghum for a time and dwarfing it. Enough seed should be used to have the stand thick, like rank wheat or coarse timothy hay thus making a very fine feed for all kinds

If grown only for early feed, I think the large, heavy sorghum, planted or drilled, selecting the variety containing the large est per cent of sugar and at the same time producing the largest yield of seed and foliage, equally as good as and perhaps better than if sown thick and grown and handled like hay; but after this kind of feed has been frozen through December and January the warm days of February and March thaw out the frost, and the juicy, saccharine matter has a tendency to ferment and sour, which unfits it for profitable feeding, changing the quality of the feed entirely, excepting the blades and seed. In this condition the cattle will eat but little of the stalk, and when they do eat it frequently belch it up after-ward, showing that much of its excellence has been eliminated and a previously very valuable crop of feed becomes almost a waste. The time of this changing process

varies with each season.

Saccharine sorghums are not grown by some who advocated them a few years ago because of the difficulty spoken of above. Everything being equal, I would select the variety containing the most saccharine matter, but I think in raising this or any other kind of feed we should take into consideration the conditions confronting us, study the nature of the plant, its vigor in the climate where grown, and overcome the objection spoken of above. Everything being equal, I would select the variety containing the most saccharine matter, but I think in raising this or any other kind of feed we should take into consideration the conditions confronting us, study the nature of the plant, its vigor in the climate whe grown, and overcome the objection spok of by sowing the seed thicker, especially for late feed; then what usually will be condensed in one large stalk will be grown in a half dozen or more small stalks, so that it would cure out and remain bright and sweet until fed.

main bright and sweet until fed.
We sow our sorghum seed from the 5th
to the 30th of May, if possible, to insure
enough of the spring rains to secure a
fine growth before the hot and usually dry mmer months. In regard to the roposition that sorghum is a dry-weath extent this is true, it is equally true that it does much better and produces a much arger yield when we have seasonable In selecting seed three things should be

carefully considered: First, select a kind that grows the most foliage and the strongest stalk. In this we have a fine feed and a variety that is most likely to feed and a variety that is most likely to withstand September winds until the crop has matured and is ready to be harvested; second, combine in this the greatest per cent of sugar; and last but not least, for this region we should select a kind that will not ripen earlier than September 1 nor later than September 30.

HARVESTING.—We try to economise in labor as well as in other expenses, so in cutting we use our mowing machines and self-dumping rakes, as in harvesting hay,

CASTOR BEANS—Bid \$1.20 per bushel EAST TENNESSEE FARMERS' CONtor prime in car-lots; smaller fots and invention.

VENTION.

Except instead of putting the sorghum in windrows we bunch two or more rakes full, then rake enough to this bunch to make after it is up. At Knoxville, Tenn., May 21-25 from 60 to 1,200 pounds, having men to take each vake load as it is dumped and make a shock built to turn rain and withprogress has been made on the program of the East Tennessee Farmers' Convenprogress has been made on the program of the East Tennessee Farmers' Convention and the farmers will be interested to learn that the following gentlemen have agreed to deliver addresses before the

Raw at \$c; boiled at all the control of the surface of the work of the "Department as Reon the work of the Farmer," while Prof. W. M. Scott, the well known state would be if kept in a silo. When put in shocks the size I have mentioned sorg-training by keeping it green and bright, as it would be if kept in a silo. When put in shocks the size I have mentioned sorg-training by keeping it green and bright, as it would be if kept in a silo. When put in shocks the size I have mentioned sorg-training by keeping it green and bright, as it would be if kept in a silo. When put in shocks the size I have mentioned sorg-training by keeping it green and bright, as it would be if kept in a silo. When put in shocks the size I have mentioned sorg-training by keeping it green and bright, at silo work in the work of the Farmer," while Prof. W. M. Scott, the well known is the world by keeping it green and bright, at silo work of the part of the size I have mentioned sorg-training by keeping it green and bri lightful speaker, will explain the "Relation of the Weather Service to the Farmer," and we can assure those who attend to the hot sun during the day and pos-

sibly showers or heavy dews at night.
Saccharine sorghum when properly
grown produces from five to twelve tons of feed to the acre; more than can be produced from any other crop known. We feed it in our pastures when the grass commences to dry up in the fall; in racks in our corrals during the winter; and if ing every day, and from the present out-look it will eclipse all former meetings of this kind. The names of the gentlemen who have already agreed to take part on or would keep a less number of cattle, I think we could feed it with equal profit on pasture in the spring before the green grass is sufficient to keep cattle from losing flesh. We give it to full-fed cattle instead of hay, and consider it equally as good or better than alfalfa or the best clover or timothy. Our farmers will i no mistake in raising what sorghum they can properly care for and put up in good can properly care for and put up in some condition for winter. Rotate this crop with other fed feeds grown. Sow sorghum occasionally instead of raising corn on the ame ground continually: follow a sorghum crop with clover and timothy or go back to corn. The ground will be more productive by the change, and the sorgtion, considers the sweet sorghums the best hum will be fully as valuable, with much less labor than it takes to raise a crop of

FORAGE CROPS.

MILLET.-This plant, like sorghum, child of the sun, and like sorghum it as also special adaptation for the soils of the prairie. It is of several families and each of these has several varieties. The smaller varieties, as the Foxtali, are probably best adapted to the production of fodder; the broom corn sorts to the production of grain, and the barnyard varieties to the production of grazing. This crop, like sorghum, should not be sown er than the close of the corn planting n, and on land prepared as for sorg From two to four pecks of seed will suffice per acre. It it can be sown with a grain drill, what was said about the sowing of sorghum will also apply to millet. The grazing should not begin too early, as the plants will pull out easily when young. Millet has, on the whole higher adaptation for soiling and fodder

pastures have failed, through freezing or other causes, good grazing may be pro-vided by sowing mixed grains, as oats, barley, spring rye and wheat or peas, when the seed of the two grains last named are not too dear. These grains, or any two of them, as for instance barley, may be first mixed and then sown at the rate of two to three bushels per acre, just as other grain is sown. Ani mals should not be grazed on such pas-tures when they are wet. They have high-est adaptation for prairie soils and for localities where clover is not an assured uccess. They will furnish a large amoun of grazing for two to three months in the summer, and may then be followed by ome other crop, as rape or winter rve When these crops are grown as solli food, the aim should be to have peas p derate in the mixture, because of their palatability and high protein content. As is well known, peas and oats make a grand solling food. The problem of grow-ing mixed grains as solling food has only just been touched upon. The door stands wide open, and the investigators who enter this field of experiment with resolute purpose, guided by good judgment, are sure of a magnificent reward.

years ago, that cow peas would have any important mission north of the fortieti parallel. Now the hope can be confidently cherished that the cow pea has a splendid mission before it as far north as the latttude of St. Paul, that is to say, as far north as the forty-fifth parallel, and more especially amid the warm summer temper-atures of the upper Mississippi basin. Cow peas of the black and red ripper varieties were matured by the writer at the Min nesota Station in the summers of 1899 and 1900, respectively, after several years of failure. The successful growth of the plant under consideration as far north as the limit fixed, and probably even fur ther north, would appear to be only a matter of seed acclimatization and o judgment in growing the plant, at least in

some of its varieties. The strong points about this plant are, first, its ability to grow in poor soils and in warm and dry weather; second, its power to grow again when it is grazed down; third, the great amount of pas.ure it may be made to furnish for cattle, sheep and swine, and fourth, its great value as a sell removator. Its value for hay in northerly latitudes may easily be overrated, where other hay plants far more easily harvested and cured can be readily grown. Cow peas can be sown with the grain drill, like sorghum, all the tubes in use, and on land similarly prepared, or they may be sown every other retacts tube only in use, or yet again, they may be sown every other greatest tube only in use, or yet again, they may be sown only such tubes being in use as a kind september. When the rows are thus far inches apart. When the rows are thus far apart, the seed could be planted with the corn planter when necessary, and in all instances when practicable cultivation nes and should be siven the same as for corn. When the rows are too close for cultiva-

When grazed with sheep, the pasturin should begin when the plants are but a few inches high, and may be repeated once again or oftener, according to the agreed to deliver addresses before the convention:

Ex-Governor W. D. Hoard, of Ft. Atkinson, Wis., needs no introduction to the farmers. He has been long and favorably known as one of the most successful dairymen in the country. His practical knowledge and his delightful humor are assurances that his address will be a later period.

So If put in shock from the self-rake. When the self-rake. When the seeds are becoming hard and to glean. Much of the straw will be lost when thus pastured by cattle and swine, but when ploughed under it greatly enriches and improves the land. Because of the difficulty in handling the green mass, cow peas are not pre-eminently adapted to soiling uses.

knowledge and his delightful humor are assurances that his address will be a great treat.

Hon. Thos. H. Paine, our own Commissioner of Agriculture, will address the convention on the "Work of the State Bureau of Agriculture."

Geo. Wm. Hill, editor of the United States Bureau of Agriculture, will speak on the work of the "Department as Related to the Advancement of the Farmer," while Prof. W. M. Scott, the well known while Prof. W. M. Scott, the well known will be provided by the size of the work of the "Cleargies will discussed by the size of the work of the "Georgies will discussed by the size of the work of the "Georgies will discussed by the size of the work of the "Cleargies will discussed by the size of the work of the size of the work of the size of the work of the "Cleargies will discussed by the size of the work of the work of the size of the work of the work of the size of the work of the work of the size of the work of the work of the size of the work SOY BEANS.-Soy beans have much the They may be planted at the same time as cow peas on land similarly prepared, and in the same way. The same things may be said about the quantities of seed to use and about the cultivation of the crop. Sheep are fond of them, but the plants break more easily than those of cow peas, and consequently do not so readily grow again.

When pastured by cattle, the should be well advanced in growth. But the highest use of this crop as a pasture crop is in the immense amount of food that a mature crop furnishes for swine. The plants are upright and yet shrub like in their habit of growth, and the number of short pods that line the branches is simply extraordinary. Both soy beans and cow peas have a very high protein ontent, both have great power to grow in hot weather, both fertilize the land by storing nitrogen in it drawn from the air, and both have beyond question an im-portant mission for Illinois and also for early all the northwest. But every atention should be given in northerly lati-udes, first, to the choice of varieties, and econd, to the acclimatization of the seed THOMAS SHAW.

Minnesota Agricultural College, St. Anthony Park, Minn.

MISSOURI CROP PROSPECTS.

MACON CO., N. E. MO.-Unless damged later, the acreage sown to wheat ast fall will all be harvested. Meadows nd pastures are meeding rain.
April 27. E. D. ALLEN.

SCHUYLER CO., N. E. MO.-Winter wheat looks exceedingly well; none was winter killed. Meadows and pastures look well. Cold and wet weather has delayed spring plowing. Farmers have just finshed sowing oats. MONROE FUGATE. April 27.

wet weather has greatly delayed spring A. L. PERRIN. CARTER CO., S. E. MO .- Wheat and

PLATTE CO., N. W. MO .- Continued

neadows look well. A mild winter was followed by a cold, backward spring, until the last few days. Farmers have about

dished planting corn.
April 27. PHILIP SIGLER. April 27.

ST. FRANCOIS CO., S. E. MO .- Spring asture is two weeks late. Oats are all own and first sowing is coming up nice-y. Wheat is looking well, though it does not promise now to equal last year's crop; the fly is doing some damage.

April 27.

A. D. POLITTE.

TEXAS CO., S. E. MO.-Wheat, rye, ats and meadows all look well; very little damage to wheat by the fly; stand good. Corn planting progressing nicely,

J. H. PURCELL. April 27.

HENRY CO., S. W. MO.-Wheat never oked better than now; pastures are ett Hale, contributed by Mr. George P. odd. The spring seems a month later han last year. A year ago corn planting has about done at this date, but this sear that was the search of the search than last year. A year ago corn planting was about done at this date, but this sea-son very little has been planted. Weather is favorable now and farmers are busy. April 27. J. M. PREZINGER.

WRIGHT CO., S. W. MO.—Winter wheat and rye are in splendid condition, but the cold spring has made meadows

and pastures very backward. April 27. JASPER NEEDHAM.

LAWRENCE CO., S. W. MO .- The condition of winter wheat continues to im-prove, although the green lice are at work in a few fields; they have do COW PEAS.-Until recent years, it was little damage and are now disappearing. generally believed that the south had a monopoly of the growth of this most wonderful plant. But few thought, not many early—June 5 to 15.

J. A. MILLER. April 27.

> PHELPS CO., CENTRAL MO.-Wheat looks well in this section; very little if any will be plowed up. Most farmers have their oats sown and quite a portion of the corn land is plowed. We had a late spring considering the mild winter. WM. DAWSON.

MARIES CO., CENTRAL MO.-Wheat never looked better than it does now. The spring has been backward; we are almost J. E. LOVE.

MILLER CO., CENTRAL MO.—The season is backward, but the prospects are good, especially for wheat and fruit. Spring planting has been delayed by the wet condition of the soil, and only a little corn planted thus far. Farmers are not orn planted thus far. Farmers are novushing their work. GEO. R. WEEKS.

AFTER 28 YEARS.

We are not much in sympathy with advertisers who make use of extravagant claims as being "biggest," the "best on earth," "none so good," etc. When, however, these or similar claims are borne out by the actual facts we believe that the advertiser has not only a perfect right, but that he should make the facts public. This is brought to mind by the advertisement of the Eikhart Carriage and Harness Manufacturing Co., of Eikhart, Ind., who regularly use this paper in season. These people for the past several years have been laying claim to being "the largest manufacturers of vehicles and harness in the world selling to the consumer exclusively." That their business methods have been approved and appreciated is evidenced by the growth, magnitude and prestige of their present business. In their two large factories at Eikhart they manufacture 178 styles of vehicles and 65 styles of harness. In vehicles they are prepared to supply the public with every conceivable article from the open buggy through, phaetons, stanhopes, a long line of top buggies, surreys, two and three seated carriages, traps, spring wagons etc., to wagonettes, busses and all classes of delivery wagons. In harness they have anything from single strap buggy harness all down the line to best double team harness for farm work. Remember that they make every article they sell in their own factories and that they employ no agents or middle men, but sell exclusively to the consumer at wholesale prices. Every article is guaranteed in a way that removes all element of chance. Everything is made of good material in the most substantial way, in the best and latest style and sold to the consumer at the most reasonable of prices. Write them for their large illustrated catalogue which they will take pleasure in sending to our readers free.

Dr. J. H. Snoddy Remedy Co., Alton, Ill. Gentlemen: There are no sick hogs in COOPER CO., CENTRAL MO .- A great deal of land was plowed last fall and win-ter; corn planting is progressing nicely. Stock will generally be turned out to pas-ture next week. Peaches, pears, flums and cherry trees are in bloom; there will be a medicarte apple bloom. rate apple bloom. S. Y. THORNTON.

MISSOURI WEATHER AND CROPS.

The U. S. Department of Agriculture Climate and Crop Bulletin of the Weather Bureau, Missouri section, for the week ending April 29, 1901, is as follows: The weather during the past week has been all that could be desired for farming op-erations and the time has been well im-





2803 LOCUST ST., ST. LOUIS. The only Positive Cure for Liquor Drinking, Mor-phine and other Narcotic Drug Using, Neurasthenia, Tobacco and Cigarette addictions.

Correspondence and Consultation Confidential.

DR. J. E. BLAINE, Physician and Manager.

Pekin Ducks. CHAMBERLAIN'S PERFECT CHICK FEED

CHAMBERLAIN'S PERFECT HEN FEED Will make your hens lay, 100 ib. sack, \$1.75. Feed sent from St. Louis by freight, Book orders sarly Only cash orders booked. Look up my record at St. Louis Co. Fair. Send P. O. Order on Kirkwood REFERENCE:—Bank

proved. The week opened cool but the Modern Heating Co.,

than the average amount of sunshine and an almost total absence of rainfall in a few of the southern and western counties, 313 Chestnut St., St. Louis, Mo. (Merchants Exchange. Heating of Dwelling Houses, School Houses and Public Buildings with the where light showers occurred on the 24th. Oat sowing is now practically completed in all sections, the seed is germinating well, and those that are up are making write for Prices. fair progress but would be benefited by a A Berkshire Sale warm rain. In some of the northern counties considerably less than the usual acre-age has been sown owing to the lateness J. W. BERRY, Dawson, Ill., will sell at pusale nearly 100 head of the best bred Berkelthat have ever been offered by sale in Illinois. of the season. Preparations for corn planting have been pushed rapidly and planting is vell under way in most sections. In a few counties the ground is too hard to plow well, and in some there is complaint that it is heavy and clammy

as a result of the recent heavy rains, but

in general it is in good condition. In a number of the southern counties obra planting is well advanced, and in a few of

the extreme southern counties some fields

have been cultivated the first time. In

Mississippi county much of the early planted corn failed to germinate and re-

planting has been necessary. Cotton planting has been in progress in the

in the southwestern counties. Early gar dens are generally made and potatoe

Wheat, rye and clover are making good

progress, as a rule, but would be benefited by warm showers, as would also pastures, which are still backward in some sections.

Little damage to wheat by Hessian fly is

ern counties some damage is being done by the grain louse, and chinch bugs have appeared in Newton county.

No further injury to fruit by frost is re-

ported, except in a few localities in the southeastern counties where some damage was done on low lands by frost on the

21st. Peaches are now in bloom in the

northern, and apples are blooming in the central and southern counties. Strawber ries are also in bloom in the souther sections and generally promise well though a little late. A. E. HACKETT,

LITERARY NOTES.

The character sketch of Edward Ever-

taken expressly for the "Review" by Da-

vis & Sanford, of New York, on Dr. Hale's 79th birthday, April 3, 1901. The sketch it-self is an appreciative tribute to one of

Many women have been reproached for living for the sole object of entertaining. No one doubts that such an aim is petty and narrowing, but it is equally certain that it is a woman's duty to understand The Art of Entertaining, and this forms the subject of an attractive and useful article by Lady Jeune in "The Cosmopolitan" for May.

AFTER 28 YEARS.

in sending to our readers free.

Dr. J. H. Snoddy Remedy Co., Alton, Ill. Gentlemen: There are no sick hogs in this part of the country at present. I have half case of the Snoddy Remedy yet. When I sell a man once, if he ever has any more sick hogs he always comes after more medicine. It will certainly do the work all right if given according to directions. I will not do without it as long as I raise hogs. Your remedy saved my hogs last fail. I had thirteen sick but lost none. Yours very truly,

Hooversburg, Ind.

Hooversburg, Ind.

Columbia, Mo., April 80.

America's "grand old men."

reported, but in a few of the southw

planted.

utheastern, and flax is about all sown





WHITE HOLLAND TURKEYS, Emden Goese.
Pekin Ducks, White Wyand ittes, S. C. White
Leghorns, Eggs reasonable, Write,
MBS. HELLE BALDWIN, Shelbyville, Mo.

BINDER TWINE-Farmers wanted as agente.

AUGUST POST, Moulton, Iowa

MAILED FREE,

'AMONG THE OZARKS,"

The Land of Big Red Apples. Is an attractive and interesting book, hand-somely illustrated with views of South Mis-sourt scanery, including the famous Olden fruit farm of 3,000 acres in Howell county. It pertains to fruit raising in that great fruit belt of America, the southern slope of the Ozarks, and will prave of great value, not only to fruit growers, but to every farmer and home seeker looking for a farm and a home.

"Wealth in Northern Arkansas, Is the title of an illustrate? pumphiet giving detailed information relative to the mining region of Northern Arkansas, conceded by experts to be the richest sine and lead mining district in the world. This district practically undeveloped, offers investors the opportunity of a lifetime. Address

J. E. LOCKWOOD. Kansas City. - - Missouri

Management of the Park **BIG FOUR ROUTE**

TO THE "PAN-AMERICAN EXPOSITION."

BUFFALO FROM ST. LOUIS.

Through Coaches. Sloopers, Library and Dining Cars.
For rates and other information call on or address
C. L. HILLEARY.
A. G. P. A.
Big Four Ticket Office, Broadway & Chestau

